

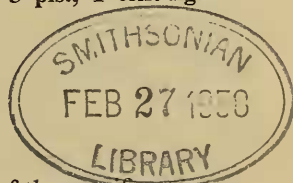
OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 501

Validation under the Plenary Powers of the specific name *adippe* as published in the combination *Papilio adippe* in 1775 in the anonymous work by Denis & Schiffermüller commonly known as the *Wiener Verzeichniss* to be the specific name for the High Brown Fritillary and validation under the same Powers of a neotype for the foregoing nominal species (Class Insecta, Order Lepidoptera)

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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(16th December 1954)

OPINION 501

VALIDATION UNDER THE PLENARY POWERS OF THE SPECIFIC NAME "ADIPPE" AS PUBLISHED IN THE COMBINATION "PAPILIO ADIPPE" IN 1775 IN THE ANONYMOUS WORK BY DENIS & SCHIFFER-MÜLLER COMMONLY KNOWN AS THE "WIENER VERZEICHNISS" TO BE THE SPECIFIC NAME FOR THE HIGH BROWN FRITILLARY AND VALIDATION UNDER THE SAME POWERS OF A NEOTYPE FOR THE FOREGOING NOMINAL SPECIES (CLASS INSECTA, ORDER LEPIDOPTERA)

RULING :—(1) The following action is hereby taken under the Plenary Powers :—

- (a) The under-mentioned specific names are hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy, save that, in so far as either of the names concerned has been used as the name for an infra-subspecific form, the action now taken is to be interpreted, as regards that class of name, as being limited to suppression for the purposes of the Law of

Priority only and therefore as not affecting the status of those names for the purposes of the Law of Homonymy :—

(i) *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe* ;

(ii) *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe*.

(b) The under-mentioned specific names are hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy :—

(i) *cydippe*, as published in the combination *Papilio cydippe*, all uses of, subsequent to Linnaeus, 1761, and prior to its use by Linnaeus in 1767 in the Twelfth Edition of the *Systema Naturae* ;

(ii) *adippe*, as published in the combination *Papilio adippe*, all uses of, subsequent to Linnaeus, 1767, and prior to its use by Denis & Schiffermüller in 1775 in the anonymous work entitled *Ankündigung eines systematischen Werkes von den Schmetterlinge der Wiener Gegend*.

(c) The under-mentioned specific name is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

berecynthia Poda, 1761, as published in the combination *Papilio berecynthia*.

(d) It is hereby directed that the binomen *Papilio adippe*, as published by Denis & Schiffermüller in 1775 in the anonymously issued work cited in (b)(ii) above is to be treated as being a scientific

name (binominal combination) then published for the first time, and the specific name *adippe* [Denis & Schiffermüller], 1775, so published, is hereby validated.

- (e) The neotype for the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, designated by Hemming (F.), Riley (N.D.) & Verity (R.) in paragraph 4 of the paper reproduced in the Appendix to the present *Opinion* is hereby validated.

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name Number 1244 :—

Fabriciana Reuss, 1920 (gender : feminine) (type species, by original designation : *Papilio niobe* Linnaeus, 1758).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

- (a) *adippe* [Denis & Schiffermüller], 1775, as published in the combination *Papilio adippe*, as validated under the Plenary Powers in (1)(a), (1)(b) and (1)(d) above and as interpreted by the validation under the same Powers in (1)(e) above of the neotype there specified, the type locality of the nominal species so named to be entered “Mödling, near Vienna”, the locality in which the said neotype was obtained (Name No. 1472) ;
- (b) *niobe* Linnaeus, 1758, as published in the combination *Papilio niobe* (Name No. 1473) (specific name of type species of *Fabriciana* Reuss, 1920) ;

(c) *cydippe* Linnaeus, 1767, as published in the combination *Papilio cydippe*, as validated under the Plenary Powers in (1)(a)(i) and (1)(b)(i) above (Name No. 1474).

(4) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe*, as suppressed under the Plenary Powers in (1)(a)(ii) above (Name No. 492) ;

(b) *adippe*, as published in the combination *Papilio adippe*, all uses of, subsequent to Linnaeus, 1767, and prior to that by [Denis & Schiffermüller] in 1775, as suppressed under the Plenary Powers in (1)(b)(ii) above (Name No. 493) ;

(c) *berecynthia* Poda, 1761, as published in the combination *Papilio berecynthia*, as suppressed under the Plenary Powers in (1)(c) above (Name No. 494) ;

(d) *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe*, as suppressed under the Plenary Powers in (1)(a)(i) above (Name No. 495) ;

(e) *cydippe*, as published in the combination *Papilio cydippe*, all uses of, subsequent to Linnaeus, 1761, and prior to its use by Linnaeus in 1767, as suppressed under the Plenary Powers in (1)(b)(i) above (Name No. 496).

I. THE STATEMENT OF THE CASE

The present *Opinion* is concerned with the question of the specific name properly applicable to the species of butterfly which at the opening of the present century and for nearly a hundred years previously had been universally known by the name *Argynnis adippe* (Linnaeus, 1767) and which in England is known as the "High Brown Fritillary". For the reasons explained in the applications submitted in the present case, the name for this species, which has a very wide distribution in the Palaearctic Region, fell into such great confusion that it became evident to specialists in the group concerned that stability could never be restored without the help of the Commission's Plenary Powers. Preliminary consultations in regard to this matter took place between Mr. Francis Hemming (*London*), Mr. B. C. S. Warren (*Winchester*), Mr. N. D. Riley (*London*) and Dr. Roger Verity (*Florence, Italy*) in 1938 and 1939, and in the first of these years a preliminary notice was given to the Office of the Commission by Mr. Hemming of his intention, with other specialists, to submit an application to the Commission for the settlement of this case on the basis of predominant current usage. In the immediately following period difficulties created by the World War and, later, pressure of work arising from his duties as Secretary to the International Commission made it impossible for Mr. Hemming to proceed with the projected application until 1949 when in conjunction with Mr. Riley and Dr. Verity he formally submitted an application to the Commission on this case. In view of the fact that many species closely allied to that dealt with in this application occur also in the Nearctic Region, Mr. Hemming and his colleagues decided at this point to ascertain the views of American specialists on the action proposed. This led to the submission to the Commission of a parallel supporting application by Mr. L. P. Gray (*Lincoln, Maine*), Professor Alexander B. Klots (*New York City, N.Y.*) and Mr. Cyril F. dos Passos (*Mendham, New Jersey*). The applications so submitted are reproduced in the immediately following paragraphs.

2. Application submitted jointly by Francis Hemming (London), N. D. Riley (British Museum (Natural History), London) and

Roger Verity (Florence, Italy) : On 29th November 1949 the following application was submitted to the Commission by Mr. Francis Hemming (*London*), Mr. N. D. Riley (*British Museum (Natural History), London*) and Dr. Roger Verity (*Florence, Italy*)¹:—

Proposed use of the Plenary Powers to determine the trivial name to be applied to the species of the genus "Fabriciana" Reuss, 1920 (Class Insecta, Order Lepidoptera) known in England as the "High Brown Fritillary" and formerly known by the scientific name "Argynnis adippe" (Linnaeus, 1767)

By FRANCIS HEMMING, C.M.G., C.B.E.
(*London, England*),

N. D. RILEY
(*Keeper, Department of Entomology,
British Museum (Natural History), London*),

ROGER VERITY
(*Florence, Italy*)

The present case is concerned with the nomenclature of two allied species of the genus *Fabriciana* Reuss, 1920, one of which was for over 150 years known by a trivial name properly applicable to the other. The first of these species to be named is a species which occurs over a wide area in the Palaearctic Region but does not occur in England; this species is referred to as the "Niobe Fritillary" in the present paper. The second species is also widely distributed in the Palaearctic Region but, unlike the "Niobe Fritillary", does occur in England, where it is known as the "High Brown Fritillary", by which name it is referred to in the present paper.

2. The facts which have to be noted are the following :—

- (1) In 1758 (*Syst. Nat.* (ed. 10) 1 : 481) Linnaeus published a description of a Fritillary with an unsilvered underside, to which he gave the name *Papilio niobe*. For the locality of this species Linnaeus wrote only "Habitat in Europa". Three years later in 1761 (*Faun. svec.* (ed. 2) : 281—282) Linnaeus gave an extended description of this species, on this occasion saying of its locality "Habitat in pratis", i.e. in fields in Sweden, the country alone dealt with in the faunistic account contained in the *Fauna svecica*. The species *Papilio niobe*

¹ The concluding paragraph (paragraph 10) referring to the consultations held by the applicants with specialists in the United States was added to this application in June 1950, following the receipt of the complementary application submitted by Mr. L. P. Gray, Professor Alexander B. Klots and Mr. Cyril F. dos Passos reproduced in paragraph 3 of the present *Opinion*.

Linnaeus, 1758, has been accepted by all subsequent authors as being the Niobe Fritillary. For the reason explained above, its type locality has been accepted as being "Sweden".

- (2) In 1761 (*Faun. svec.* (ed. 2) : 281) Linnaeus published a description of a species of Fritillary with a silvered underside, of which he said the locality was "Habitat in pratis" (i.e. in fields in Sweden), to which he gave the name *Papilio cydippe*. Six years later Linnaeus himself dealt with this species again, as explained in (4) below. During the intervening period, this name was used by three authors: (1) Scopoli, 1763, *Ent. carn.* : 162; (2) Brünnich in Pontoppidan, 1763, *Danske Atlas* 1 : 685 no. 26; (3) Müller, 1764, *F. Ins. Frid.* : 35, no. 328. The species to which this name was applied by Scopoli may have been either the High Brown Fritillary or some form of the Niobe Fritillary, his description not being sufficient to determine this question with certainty. The species to which Brünnich applied the name *Papilio cydippe* in Bishop Pontoppidan's *Danske Atlas* was certainly not the High Brown Fritillary and was presumably the Niobe Fritillary in one of its forms. Dr. Tuxen (*Universitetets Zoologiske Museum, Copenhagen*), whom we have consulted, has expressed the same view (*in litt.*, 14th March 1950); after observing that the only reference to *Papilio cydippe* in the *Danske Atlas* is on page 685, where the name appears without any comment except a reference to the Second Edition of the *Fauna svecica* of Linnaeus, Dr. Tuxen states that the High Brown Fritillary has never been found in Denmark² and that Brünnich's citation of this species (if in fact this is what Brünnich conceived himself to be doing) must have been due to an error of identification. (We may add at this point that, in view of the statements which have been published that Brünnich gave a figure of *Papilio cydippe* in the above work and our inability to find any such figure in any copy available to us, we asked Dr. Tuxen to look into this matter on our behalf; in his reply (referred to above), Dr. Tuxen informed us that no such figure was to be found either in any of the copies of the

² It has since transpired that this statement is incorrect. The question whether the High Brown Fritillary occurs in Denmark formed the subject of correspondence between Mr. N. D. Riley (on behalf of the applicants) and Dr. S. L. Tuxen (*Universitetets Zoologiske Museum, Copenhagen*) at the time when the present application was in preparation. In making this enquiry, Mr. Riley referred to this species under the specific name *cydippe*. Dr. Tuxen has since explained (in a letter to Mr. Riley dated 3rd October 1952) that he unfortunately did not recognise the High Brown Fritillary under this name and that it was for this reason that he stated that the species so named did not occur in Denmark. In making this communication, Dr. Tuxen added: "*Argynnis adippe* is common in Denmark. . . . I have read your paper now, and I find that my incorrect statement is used as an argument for Brünnich's *cydippe* being *niobe*, but, as far as I understand it, the conclusion in the paper would have been the same if it had been realised that *adippe* did occur in Denmark".

Danske Atlas which he has examined in Denmark or in a copy in Norway which he had caused to be specially examined from this point of view. Brünnich's alleged figure of *Papilio cydippe* in this work may therefore be dismissed as a figment of the imagination. Turning to the third of the authors cited above, Müller (1764), we may certainly conclude, for reasons similar to those explained above in connection with Brünnich's work, that the insect to which Müller applied the name *Papilio cydippe* was not the High Brown Fritillary and was therefore almost certainly a form of *Papilio niobe* Linnaeus.

- (3) In 1767 (*Syst. Nat.* (ed. 12) 1 : 776) Linnaeus published a description of an entirely different species under the name *Papilio cydippe*. This species has been recognised by all authors as the Oriental species of the genus *Cethosia* now known as *Cethosia cydippe* (Linnaeus, 1767).
- (4) In consequence of having given the name *Papilio cydippe* to the Oriental Cethosiid, Linnaeus in the same work (1767, *Syst. Nat.* (ed. 12) 1 : 786) abandoned the name *Papilio cydippe* Linnaeus, 1761, for the Swedish Fritillary, renaming that species *Papilio adippe*. The species so named was recognised as the High Brown Fritillary by all subsequent authors for nearly 150 years (i.e. until Verity 1913), the trivial name *adippe* Linnaeus, 1767, being used for that species. (There are other cases in which, as here, Linnaeus, on recognising that he was creating a homonym, suppressed the earlier homonym, in order to make way for the later one.)
- (5) In 1913 (*J. linn. Soc. Lond.* (Zool.) 32 : 173—191) Verity published a critical account of an examination made by himself of the butterflies contained in the Linnean collection preserved in Burlington House. As regards the species here under consideration Verity noted (: 182—183): (a) that the collection contains two males marked "niobe" which correspond exactly with the Linnean description of *Papilio niobe* and which are examples of the Niobe Fritillary with unsilvered undersides; (b) that the collection contained one Linnean specimen marked "cydippe" which is a female of the silvered under-side form of the Niobe Fritillary. Thus the trivial name *cydippe* Linnaeus, 1761 (and its substitute name *adippe* Linnaeus, 1767) apply not, as previously supposed by every worker, to the High Brown Fritillary but to the Niobe Fritillary.
- (6) Verity realised that this discovery deprived the High Brown Fritillary of its long-accustomed trivial name *adippe* Linnaeus, and accordingly considered what name was properly applicable to that species. In this connection he discussed two early names, namely (a) *Papilio berecynthia* Poda, 1761 (*Ins. Mus. graev.* : 75, no. 38), and (b) *Papilio syrinx* Borkhausen, 1788

(*Nat. europ. Schmett.* 1 : 37 no. 9). Verity rejected the first of these names on the ground that Poda's description was too vague to enable a definite identification to be made, and Borkhausen's name *syrinx* on the ground that it was based on an abnormal pair figured by Esper (pl. 74, figs. 1, 2) of the High Brown Fritillary (treated by Esper as *Papilio adippe* Linnaeus). Verity thereupon concluded that a new trivial name was needed and published the name *Argynnis esperi* as a *nom. nov.* for this species. He added that he took Esper's figures as typical. A few lines earlier he had rightly stigmatised Esper's figs. 1 and 2 on pl. 74 (the type specimens of Borkhausen's *syrinx*) as abnormal. He did not, however, specify which were the figures of Esper's which he adopted as typical. He has, however, since stated (*in litt.*) that he had in mind Esper's pl. 18, fig. 1, also his pl. 26, fig. 4, and pl. 43, fig. 2 (a female).

- (7) Verity's paper was the subject of severe criticism in conservative entomological circles and for long was unfortunately neglected, a neglect which is responsible for the fact that today, thirty-nine years after its publication, there still remains the utmost uncertainty and confusion regarding the trivial name which should be applied to the High Brown Fritillary.
- (8) In 1916 the British National Committee on Entomological Nomenclature prepared a Report which was published by the Entomological Society of London, in which the Committee rejected the conclusions reached by Verity but pointed out that the trivial name *cydippe* Linnaeus, 1761, had been wrongly rejected by Linnaeus, 1767 (on the ground that it was a homonym of the same name published by him in that year—1767—for a different species) and therefore that this name should be reintroduced in place of the familiar name *adippe* Linnaeus, 1767. The Committee were correct in their conclusions regarding the relative status of the trivial names *cydippe* Linnaeus, 1761, and *adippe* Linnaeus, 1767, but unfortunately their conclusions on this matter were totally irrelevant in view of Verity's prior discovery (1913) that both names applied not to the High Brown Fritillary but to the Niobe Fritillary. However, the conclusions of the Committee won a considerable degree of support from workers who were not interested in original descriptions but sought only an authoritative pronouncement as to the name which they should apply to the High Brown Fritillary. In consequence the trivial name *cydippe* Linnaeus, 1761, won a considerable measure of support and, as a result, the species has frequently since been referred to in the literature under this trivial name.
- (9) Notwithstanding the considerable use of the trivial name *cydippe* Linnaeus, 1761, for the High Brown Fritillary, this usage has

been largely confined to British workers, the majority of European workers continuing to use the name *adippe* Linnaeus, 1767, which (as we have seen) not only applies to a different species, the Niobe Fritillary—just as the name *cydippe* Linnaeus, 1761, does—but would be an invalid synonym of *cydippe* Linnaeus, 1761, even if both names belonged (as was supposed up to 1913) to the High Brown Fritillary.

- (10) In 1929 Verity reverted to this subject in a further paper (*Bull. Soc. ent. France* 1929 : 277—280), in which he accepted the conclusion that the High Brown Fritillary could not properly be known by the trivial name *esperi* Verity, 1913 (based, as explained in (6) above, on Esper's figures of *adippe* Linnaeus) but must be known by whatever was the oldest available trivial name given to any subspecies of the collective species represented by the High Brown Fritillary. Once more, as in 1913, he examined and rejected the claims of the trivial names *berecynthia* Poda, 1761, and *syrinx* Borkhausen, 1788. Having reached this stage Verity examined the claims of the trivial name *phryxa* Bergsträsser (then attributed by him to 1780 but in fact not published until 1783). This name was published in the binominal combination *Papilio phryxa* in vol. 4 of Bergsträsser's *Nomencl. Ins.* (: 27 pl. 82, figs. 1, 2, 3). These figures had been considered in 1864 (*Beitr. Schmett. Kunde.* 2 : 69) by Werneburg, who had concluded that all three figures represented the Niobe Fritillary (= *Papilio niobe* Linnaeus, 1758). Verity, while admitting that Bergsträsser's fig. 3 might represent a *niobe* claimed that figs. 1 and 2 on Bergsträsser's plate represented the High Brown Fritillary. He accordingly concluded that this was the earliest available trivial name for this species, which in the remainder of the paper he referred to as *Argynnis phryxa* (Bergsträsser).
- (11) Verity recognised very quickly that the solution proposed in 1929 was unsatisfactory, and in the following year (1930, *Ent. Rec.* 42 : 149—152) reverted once more to this subject. On this occasion he advanced the view that, as the trivial name *cydippe* Linnaeus, 1761, and its synonym *adippe* Linnaeus, 1767, had been given by Linnaeus to individual forms (of *Papilio niobe* Linnaeus, 1758), those names possessed no status under the *Règles*, the lowest category of name there recognised being the trivial name of a subspecies. Under this argument the name *adippe* Linnaeus, 1767 (as published in the binominal combination *Papilio adippe*) had no status under the *Règles* and did not invalidate the later use of the same binominal combination (though a homonym) when first it was published as a specific name. The next such occasion was, he pointed out, in 1775, when Rottemburg (1775, *Naturforscher* 6 : 13) applied this name to a species which Verity claimed was

indubitably the High Brown Fritillary. Verity accepted as the trivial name for this collective species the trivial name *adippe* as from Rottemburg, 1775. Six years later (1936, *Ent. Rec.* 48 (Suppl.) : (83)) Verity once more dealt with this subject, reaffirming the argument advanced in 1930 but adding Schiffermüller to Rottemburg as the valid authority for the name *adippe*, as applied to the High Brown Fritillary (owing, as he has since informed us, to the fact that Rottemburg's paper in the *Naturforscher* and Schiffermüller's anonymous catalogue of the butterflies of the Vienna district were both published in the same year and no data were available for determining the relative dates of publication of these works³).

- (12) In the meantime—in 1935—an event had occurred which was to lead ultimately to the clarification of the meaning of the *Règles* on the question of the status of infra-subspecific names, the lack of regulation of which in the *Règles* had led Verity in 1930 to advance the view that, since (as he claimed) the trivial names *cydippe* Linnaeus, 1761, and *adippe* Linnaeus, 1767, though published as the trivial names of species, had been applied to aberrant specimens, i.e. to infra sub-specific forms, they possessed no status in nomenclature and therefore that either name was available nomenclatorially as from the first later date on which it was definitely applied as the name of a species. For at its meeting held in Lisbon in 1935 the International Commission on Zoological Nomenclature had agreed that the whole problem of the status (if any) possessed by, or to be given to, the trivial names of infra-subspecific forms should be studied by the Secretary to the Commission, in consultation with interested specialists, and a Report thereon submitted to the next meeting of the Commission. The Report so prepared was considered by the Commission at its meeting held in Paris in July 1948 and on the basis of recommendations framed by the Commission in the light of that Report, the Thirteenth International Congress of Zoology agreed upon the insertion in the *Règles* of provisions clarifying the status of such names. Of the decisions then taken, only one need detain us. This was the decision that the criterion to be applied for determining whether a given trivial name was for the purposes of the *Règles* the trivial name on the one hand of a species or a subspecies or on the other hand the trivial name of an infra-subspecific form was the way in which that name had first been published; a trivial name published as the trivial name of a species or subspecies possessed status as such, though it might be applied by later authors as the name of an infra-subspecific form, if this was judged proper on taxonomic grounds. Even so, however, the name retained

³ This question has since been settled in favour of von Rottemburg's paper by the Ruling given in *Opinion* 516 (now in the press).

its status as a specific (or, as the case might be, a subspecific) trivial name and accordingly rendered invalid as a homonym the same trivial name if published later as a specific or subspecific trivial name in combination with the same generic name (1950, *Bull. zool. Nomencl.* 4 : 83—96).

- (13) The decision by the Paris Congress in this matter is of outstanding importance in the present case, destroying, as it does, the argument that the trivial name *adippe* as from Rottemburg or Schiffermüller could properly be used as the specific trivial name of the High Brown Fritillary, notwithstanding the fact that earlier that trivial name had been published (by Linnaeus) in combination with the same generic name (*Papilio*) as the trivial name of a form (later claimed to be of only infra-subspecific rank) belonging to a different species (= *Papilio niobe* Linnaeus, 1758, the Niobe Fritillary).

3. In these circumstances we are back again exactly where we were when in 1913 Verity first discovered that the trivial names *cydippe* Linnaeus, 1761, and *adippe* Linnaeus, 1767, had been published by Linnaeus not for the High Brown Fritillary but for the Niobe Fritillary. We are under the necessity therefore of considering and, if possible, of determining, what is the oldest trivial name published for any subspecies of the collective species known as the High Brown Fritillary. It is here that we immediately encounter a difficulty which appears to be insuperable. This is the difficulty presented by the trivial name *berecynthia* Poda, 1761, as published in the binominal combination *Papilio berecynthia*. This nominal species has been identified by some authors as representing the High Brown Fritillary, by others as representing the Niobe Fritillary. We are inclined to think that the species in question was the High Brown Fritillary, but whether Poda had before him this species or the Niobe Fritillary must always remain a matter of opinion. In consequence, there can be no stability in the nomenclature of the High Brown Fritillary, so long as the trivial name *berecynthia* Poda remains an available name, for it will be a constant cause of confusion and instability, so long as it is available to be brought into use by any worker who claims to recognise the High Brown Fritillary in Poda's description of his *berecynthia*. Confusion in the nomenclature of this species has already caused a great deal of harm and its continuance would be calculated to cause still greater harm, in view of the importance of being able clearly to identify by name this specific unit, owing to the fact that in a series of important papers published during the inter-war years Reuss has shown that a number of distinct species in the Eastern part of the Palaearctic Region (and, in one case also in Europe) have hitherto been confused with the High Brown Fritillary. The solution of the complex taxonomic problem so disclosed will be difficult in any case but will be rendered quite unnecessarily difficult if constant doubt is allowed to persist in regard to the trivial name of the West European (including British) High Brown Fritillary.

4. As a first step, it is, in our view and also in that of our friend and colleague Mr. B. C. S. Warren, absolutely essential that the difficulty created by the trivial name *berecynthia* Poda, 1761, should be cleared out of the path, by the International Commission on Zoological Nomenclature using its Plenary Powers to suppress that name for the purposes of Article 25 of the *Règles* (i.e. to suppress the availability of this name) but not for the purposes of Article 35 (this name still making it impossible to use the trivial name *berecynthia* for some other species in the genus in combination with the name of which it was originally published or in the genus (*Fabriciana* Reuss, 1920) to which the species here under consideration are now assigned). The next and final step in securing stability in the nomenclature of this group will be for the Commission authoritatively to determine what is the trivial name which should be applied to the High Brown Fritillary. This aspect of the problem is discussed in the following paragraphs. Before passing to this part of our subject, we must note, however, that great confusion would undoubtedly arise if the trivial name *adippe* Linnaeus, 1767, were to be used to denote infra-subspecific forms of the Niobe Fritillary (*Papilio niobe* Linnaeus, 1758) after having been used for over 150 years as the specific trivial name of the closely allied High Brown Fritillary. Similar considerations apply to the trivial name *cydippe* Linnaeus, 1761. Quite apart from any other reason, it is clearly necessary that the trivial names *cydippe* Linnaeus and *adippe* Linnaeus should be suppressed by the Commission under its Plenary Powers so as to make it impossible for these trivial names to be used as trivial names for infra-subspecific forms of the Niobe Fritillary.

5. In considering the question of the trivial name to be applied to the High Brown Fritillary, we are still confronted with difficulties even if we assume that the initial stumbling block represented by the doubtful trivial name *berecynthia* Poda, 1761, is removed by the suppression of that name by the Commission under its Plenary Powers for, as we have already seen (paragraph 2(10) above) the next trivial name, *phryxa* Bergsträsser, 1783, as published in the binominal combination *Papilio phryxa*, presents doubts similar to those presented by the trivial name *berecynthia* Poda, 1761, for it cannot be affirmed with absolute certainty that the species so named was in fact the High Brown Fritillary and not the Niobe Fritillary. After careful consideration, we are of the unanimous opinion that, since in any case it will, in our view, be necessary for the Commission to use its Plenary Powers for the purpose of suppressing the trivial name *berecynthia* Poda, 1761, the best course and indeed the only course capable of providing a final solution of the difficulties in which the nomenclature of this group of butterflies has become so inextricably involved, would be for the Commission at the same time to use its Plenary Powers to suppress, as a specific trivial name, the trivial name, *adippe* Linnaeus, 1767, as published in the binominal combination *Papilio adippe* in such a way as to render that trivial name (as published in the same binominal combination) a nomenclatorially available name, as published by some author subsequent to Linnaeus, 1767,

and as applied beyond question to the High Brown Fritillary. The adoption of this course offers many important advantages: first, if the author so selected (under the Plenary Powers) to be the accepted author of the trivial name *adippe* as applied to the High Brown Fritillary published the paper in question prior to 1783, the trivial name *adippe* would thereupon become without question the oldest available trivial name for the High Brown Fritillary and there would in that event be no need to consider the difficulties arising from the existing doubts as to the identity of the species to which in 1783 Bergsträsser gave the specific name *Papilio phryxa*; second, the adoption of this course would confer upon the High Brown Fritillary the trivial name by which incorrectly it has been known for over 150 years and by which today it is still called by most authors.

6. If it be granted that the foregoing represents the solution to be sought, it becomes necessary next to consider which use of the trivial name *adippe* for the High Brown Fritillary should be selected as the use to be adopted (under the Plenary Powers) as the first valid nomenclatorial use of that name for this species. The first desideratum is naturally that the use in question should unequivocally apply to the High Brown Fritillary and to no other species. The second is that the use to be selected is one in which the author concerned gave a clear indication of the locality of the specimens from which his description was drawn up, this being a matter of great importance in the case of a polytypic species such as the present for determining the type locality of the nominotypical subspecies.⁴ Finally, it would be helpful, other things being equal, if the usage selected were one where the author concerned gave a clearly recognisable figure of the High Brown Fritillary. The first author unequivocally to apply the name *Papilio adippe* to the High Brown Fritillary and at the same time to give a figure of that species under that name was Esper in the year 1777 (*Die Schmett.* 1(3) : pl. 18, fig. 1♂; 1(5) : pl. 26, fig. 4♂ [“♀”]; 1(8) : pl. 43, fig. 2♀). Two years later (in 1779), the text relating to this species was published (*Die Schmett.* 1(9) : 232—237), Esper again applying to this species the name *Papilio adippe*. The discussion given by Esper shows conclusively both that he fully realised the differences between the High Brown Fritillary on the one hand and the Niobe Fritillary (*Papilio niobe* Linnaeus, 1758) and the Dark Green Fritillary (*Papilio aglaja* Linnaeus, 1758) on the other hand and also that he was well aware of the nature of the confusion between these species into which most of his predecessors had fallen. At the same time he correctly pointed out that among the then most recent authors there were two who also had correctly appreciated the differences between the three species discussed above. These authors were Rottenburg (1775, *Naturforscher* 6 : 13) and the anonymous “Herren

⁴ By a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 21, Decision 18) the subspecies which forms the basis of the original description of a polytypic species is in future to be known as the “nominated” subspecies of that species.

Verfasser des Verzeichnisses der Wiener Gegend" (i.e. Schiffermüller & Denis).

7. In these circumstances it is plain that the choice lies between (a) the foregoing passage in Esper's great work, (b) the slightly earlier paper by Rottemburg, and (c) the anonymous book by Schiffermüller and Denis (both of which latter were published in the year 1775, the date "1776" commonly attributed to Schiffermüller's book referring to a second impression, published under a slightly different title, one year after the otherwise identical first edition). Esper's book, as also Rottemburg's paper, suffers from the severe disadvantage that no clear type locality is given for this species. The book by Schiffermüller and Denis, which may have actual priority over Rottemburg's paper (a question which, by decision of the International Commission on Zoological Nomenclature, is at present under investigation and is therefore *sub judice*)⁵ offers the great advantage that, as shown by its title ("Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend"), we know definitely that the butterflies described therein were taken in the neighbourhood of Vienna. For these reasons we conclude that the use of the name *Papilio adippe* as a specific name for the High Brown Fritillary which it is desirable should be designated by the International Commission as the first valid use of this name for any species should be that in 1775 by Schiffermüller and Denis on page 177 in the anonymous work *Ankündigung syst. Werkes Wien. Gegend*, where this name was unequivocally used to denote the High Brown Fritillary and where the type locality of the species so named was clearly indicated (by the title of the book in which this name was published). The adoption of this proposal by the International Commission will involve the suppression, under the Plenary Powers, both of the trivial name *cydippe* Linnaeus, 1761 (as published in the binominal combination *Papilio cydippe*) and of all uses of the trivial name *adippe* in combination with the generic name *Papilio* prior to its use in this manner by Schiffermüller and Denis in 1775. The elimination of the name *Papilio cydippe* Linnaeus, 1761, as an unwanted synonym of *Papilio niobe* Linnaeus, 1758, will provide incidentally a welcome opportunity for validating that specific name as applied by Linnaeus in 1767 to the Cethosiid species, which has been so generally known by that name.

8. We may now sum up our conclusions by saying that, in our opinion, there is no possibility of resolving the confusion surrounding the nomenclature of the group of species centred around the species *Papilio niobe* Linnaeus, 1758 (= *Fabriciana niobe* (Linnaeus, 1758)) and in particular the species known in England as the High Brown Fritillary, unless the International Commission on Zoological Nomenclature uses its Plenary Powers to determine the specific trivial name to be used for the High Brown Fritillary.

⁵ See Footnote 3.

9. The specific request which we now submit to the International Commission on Zoological Nomenclature is that it should :—

(1) use its Plenary Powers :—

(a) to suppress to the extent and for the purposes severally specified below :—

(i) in the realm of specific and subspecific names, the following trivial names, both for the purposes of the Law of Priority and for those of the Law of Homonymy :—

(A) the trivial name *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe* ;

(B) the trivial name *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe* ;

(C) all uses of the trivial name *cydippe* in combination with the generic name *Papilio* Linnaeus, 1758, subsequent to the publication of the name *Papilio cydippe* Linnaeus, 1761, and prior to the publication of the same combination by Linnaeus in 1767 in the 12th edition of the *Systema Naturae* ;

(D) all uses of the trivial name *adippe* in combination with the generic name *Papilio* Linnaeus, 1758, subsequent to the publication of the name *Papilio adippe* Linnaeus, 1767, and prior to the publication by Denis & Schiffermüller in 1775 of the same binominal combination in the anonymous work entitled *Ankündigung eines systematischen Werkes von den Schmetterlinger der Wiener Gegend* ;

(ii) in the realm of specific and subspecific names the under-mentioned name, for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

the trivial name *berecynthia* Poda, 1761, as published in the combination *Papilio berecynthia* ;

(iii) in the realm of infra-subspecific names, the under-mentioned names for the purposes of the Law of

Priority but not for those of the Law of Homonymy :—

(A) the trivial name *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe* ;

(B) the trivial name *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe* ;

(b) to validate the under-mentioned specific trivial names in the realm of specific and subspecific names :—

(i) the trivial name *adippe*, as published in the combination *Papilio adippe*, by Denis & Schiffermüller in 1775 on page 177 in the anonymous work specified in (a)(i)(D) above ;

(ii) the trivial name *cydippe* Linnaeus, 1767, as published in the combination *Papilio cydippe* ;

(c) to direct that the specific trivial name *adippe* [Denis & Schiffermüller], 1775, as published in the combination *Papilio adippe*, as validated in (b)(i) above, be applied to the species figured under that name by Esper in 1777 as fig. 1 on pl. 18 of the work entitled *Die Schmetterlinge in Abbildungen nach der Natur* :

(2) that the under-mentioned trivial names be placed on the *Official List of Specific Trivial Names in Zoology* :—

(a) *adippe* [Schiffermüller & Denis], 1775, as published in the combination *Papilio adippe*, as validated in (1)(b)(i), and as defined in (1)(c) and (1)(d) above and with “Wiener Gegend” as its type locality ;

(b) *niobe* Linnaeus, 1758, as published in the combination *Papilio niobe* ;

(c) *cydippe* Linnaeus, 1767, as published in the combination *Papilio cydippe*, as validated in (1)(b)(ii) above ;

(3) that the under-mentioned trivial names be placed on the *Official Index of Rejected and Invalid Specific Trivial Names in Zoology* :—

(a) *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe*, as proposed in (1)(a)(i)(B), to be suppressed under the Plenary Powers ;

- (b) all uses of the trivial name *adippe* in combination with the generic name *Papilio* Linnaeus, 1758, subsequent to the publication of the name *Papilio adippe* Linnaeus, 1767, and prior to the publication of the name *Papilio adippe* [Schiffmüller & Denis], 1775 (as validated in (1)(c)(i) above, as proposed in (1)(a)(i)(D) above, to be suppressed under the Plenary Powers ;
- (c) *berecynthia* Poda, 1761, as published in the combination *Papilio berecynthia*, as proposed, in (1)(a)(ii) above, to be suppressed under the Plenary Powers ;
- (d) *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe*, as proposed, in (1)(a)(i)(A) above, to be suppressed under the Plenary Powers ;
- (e) all uses of the trivial name *cydippe* in combination with the generic name *Papilio* Linnaeus, 1758, subsequent to the publication of the name *Papilio cydippe* Linnaeus, 1761, and prior to the publication of the name *Papilio cydippe* Linnaeus, 1767 (as validated in (1)(b)(ii) above), as proposed in (1)(a)(i)(C) above.

10. The species (the High Brown Fritillary) of the genus *Fabriciana* Reuss, 1920, the trivial name to be applied to which forms the subject of the present application is exclusively Palaearctic in its distribution. The genus to which that species is here assigned belongs, however, to a large group of closely allied genera which occur in every zoo-geographical Region and are particularly strongly represented in the Nearctic Region. When preparing the present application we thought it desirable therefore to confer with leading specialists in the United States who are specially interested in this group. We accordingly consulted Mr. Cyril F. dos Passos (*Mendham, New Jersey, U.S.A.*), Professor Alexander B. Klots (*New York, N.Y., U.S.A.*) and Dr. L. P. Gray (*Lincoln, Maine, U.S.A.*). It is a matter of great satisfaction to us to find that our American colleagues and ourselves are in complete agreement both as to the facts of the present case and as to the action which it is desirable should now be taken to put an end to the intolerable confusion in nomenclature which has for so long hampered the study of the species concerned. We are particularly gratified to learn from our American colleagues that it is their intention themselves to submit an application to the International Commission on lines parallel to those adopted by ourselves in the present paper.

3. Application submitted jointly by L. P. Gray (Lincoln, Maine, U.S.A.), Alexander B. Klots (New York City, N.Y., U.S.A.) and Cyril F. dos Passos (Mendham, New Jersey, U.S.A.) : On 11th May 1950 the following application was submitted to the

Commission by Mr. L. P. Gray (*Lincoln, Maine, U.S.A.*),
 Professor Alexander B. Klots (*New York City, N.Y., U.S.A.*)
 and Mr. Cyril F. dos Passos (*Mendham, New Jersey, U.S.A.*):—

**The “niobe/cydidippe/adippe” problem (Class Insecta, Order
 Lepidoptera, Family Nymphalidae with suggestions for its
 solution**

By L. P. GRAY

(*Lincoln, Maine, U.S.A.*),

ALEXANDER B. KLOTS

(*The College of the City of New York, New York City, N.Y., U.S.A.*),

CYRIL F. DOS PASSOS

(*Research Associate, Department of Insects and Spiders,
 The American Museum of Natural History,
 New York City, N.Y., U.S.A.*)

We have studied the situation hereinafter discussed respecting the proper use of the specific trivial names *niobe*, *cydidippe* and *adippe* in the family NYMPHALIDAE (Class Insecta, Order Lepidoptera), and, being unable to find a satisfactory solution of the problem without recourse to the Plenary Powers of the International Commission on Zoological Nomenclature, and having corresponded with Mr. Francis Hemming and Mr. N. D. Riley on the subject and finding them of like opinion, we have prepared for the consideration of the Commission this memorandum setting forth the issues involved and the conclusions reached.

The Facts

(1) *Papilio niobe* Linnaeus, 1758, hereinafter referred to as the “Niobe Fritillary” without silver markings on the under-side of the secondaries, and with its type locality in the fields of Sweden, presents no nomenclatorial problem.

(2) *Papilio cydidippe* Linnaeus, 1761, with silver markings on the under-side of the secondaries, is a synonym of *P. niobe*. It has long been misdetermined as a different butterfly which is hereinafter referred to as the “High Brown Fritillary”.

(3) *Papilio adippe* Linnaeus, 1767, is a new name for *P. cydidippe* and a synonym of *P. niobe*. It has also long been misdetermined as a different butterfly, namely that referred to in the present paper as the “High Brown Fritillary”.

(4) The proper scientific name to apply to the High Brown Fritillary has long been a matter of controversy and misunderstanding, there being several names which may or may not apply to this insect, it being

impossible to determine with certainty their applicability. One of these names, *Papilio berecynthia* Poda, 1761, is based on a description so vague that a definite identification cannot be made.

Conclusion

It is highly desirable that the correct scientific name to apply to the High Brown Fritillary be settled once and for all, and that can best be done by the use by the Commission of its Plenary Powers.

Procedure

To accomplish the foregoing, the following steps are recommended:—

(1) that the Commission use its Plenary Powers :—

(a) to suppress :

- (1) the specific trivial name *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe*, and its objective synonym, the trivial name *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe* ;
- (2) all uses of the trivial name *adippe* in combination with the generic name *Papilio* Linnaeus, 1758, subsequent to the publication of the name *Papilio adippe* Linnaeus, 1767, and prior to the use of the same name by [Denis & Schiffermüller] in 1775 in the anonymous work entitled *Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend herausgegeben von einigen Lehrern am k.k. Theresianum*, page 177 ;
- (3) the use of the trivial names *cydippe* Linnaeus, 1761, and *adippe* Linnaeus, 1767, specified in (a)(1) above, not only as specific or subspecific trivial names in the genus to which the species *Papilio niobe* Linnaeus, 1758, may at any time be referred, but also as infra-subspecific trivial names in that genus ;
- (4) the specific trivial name *berecynthia* Poda, 1761, as published in the combination *Papilio berecynthia*, not only as a specific or subspecific trivial name in the genus to which the species *Papilio niobe* Linnaeus, 1758, may at any time be referred, but also as an infra-subspecific trivial name in that genus ;

(b) to validate the specific trivial name *adippe* for the “ High Brown Fritillary ” in the binominal combination *Papilio adippe* as from the date in 1775 when that name was published by [Denis & Schiffermüller] in the work specified in (a)(2) above, and to declare that that name is

to be applied to the species figured by Esper in 1777, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen*, 1(3) : pl. 18, fig. 1, and that the locality "Wiener Gegend" is to be taken as the type locality of the nominotypical subspecies of the species so named ;

(II) that the below-mentioned trivial name be placed on the *Official List of Specific Trivial Names in Zoology* :—

adippe [Denis & Schiffermüller], 1775, as published in the combination *Papilio adippe*, as validated and defined in (I)(b) above ;

(III) that the below-mentioned trivial names be placed on the *Official Index of Rejected and Invalid Specific Trivial Names in Zoology* :—

(a) *adippe* Linnaeus, 1767, as published in the combination *Papilio adippe* ;

(b) *adippe*, all uses of, as a specific trivial name in combination with the generic name *Papilio*, subsequent to Linnaeus, 1767, and prior to [Denis & Schiffermüller], 1775 ;

(c) *berecynthia* Poda, 1761, as published in the combination *Papilio berecynthia* ;

(d) *cydippe* Linnaeus, 1761, as published in the combination *Papilio cydippe*.

II. THE SUBSEQUENT HISTORY OF THE CASE

4. Registration of the present application : Upon the receipt in 1938 of Mr. Hemming's preliminary notification regarding the proposed submission, with other specialists, of an application for the use of the Commission's Plenary Powers for the purpose of stabilising the specific name for the High Brown Fritillary, the Registered Number Z.N.(S.) 79 was allotted to this subject.

5. Issue of Public Notices in 1947 : Although in 1947 no substantive application had been received for the use of the Commission's Plenary Powers to stabilise the specific name

adippe Linnaeus, 1767, as published in the combination *Papilio adippe*, to be the specific name for the High Brown Fritillary, it was judged that in view of the great interest of this subject to lepidopterists it would be helpful if the maximum publicity could be secured at this stage in regard to the action which it was proposed that the Commission should be asked to take in this case. Accordingly, on 14th November 1947 Public Notice of the possible use by the International Commission of its Plenary Powers in the foregoing sense was given under the procedure prescribed by the Ninth International Congress of Zoology, Monaco, 1913. The issue of these Public Notices elicited no objection to the action proposed to be taken under the Plenary Powers.

6. Publication of the present application : For the reasons explained in paragraph 1 of the present *Opinion*, the application by Mr. Hemming and his colleagues was received in the Office of the Commission on 29th November 1949 ; the application by Mr. Gray and his colleagues was submitted on 11th May 1950. The number of prior applications then awaiting publication made it impossible to send to the printers the two applications involved in the present case until 4th July 1952. Both applications were published on 29th August 1952 in Part 11 of Volume 6 of the *Bulletin of Zoological Nomenclature* (Gray, Klots & dos Passos, 1952, *Bull. zool. Nomencl.* 6 : 323—325 ; Hemming, Riley & Verity, 1952, *ibid.* 6 : 325—336).

7. Issue of Public Notices in 1952 : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51—56) Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 29th August 1952 (a) in Part 11 of Volume 6 of the *Bulletin of Zoological Nomenclature* (the part in which the applications referred to above were published) and to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to eight entomological serials in Europe and America.

8. Comments Received : Twenty-one (21) specialists submitted comments on the present case. Of these, eighteen (18) favoured

the use by the Commission of its Plenary Powers to secure that the name *adippe* should be the oldest available name for the High Brown Fritillary and three (3) were opposed to that course. Of the specialists who favoured the validation of the specific name *adippe* for the foregoing species, seventeen (17) advocated that (as recommended in the applications submitted to the Commission) this name should be validated as from Denis & Schiffermüller (1775), and one (1) that it should be validated as from Müller (P.L.S.), (1764). Of the three (3) specialists who were opposed to the *adippe* solution, two (2) advocated the adoption of the specific name *phryxa* Bergsträsser ([1783]) as the specific name for the High Brown Fritillary, and one (1) the specific name *syrinx* Borkhausen, 1788. The countries of residence of the twenty-seven (27) specialists (including the applicants) who expressed their views on the present case were as follows :—

(1) Specialists who favoured the “*adippe*” solution (24 specialists) :

Austria	1
Canada	2
England	3
Germany	2
Italy	1
Netherlands	1
Spain	1
Sweden	1
Switzerland	1
U.S.A.	11

(2) Specialists who favoured the “*phryxa*” solution (2 specialists) :

Czechoslovakia	1
France	1

(3) Specialists who favoured the “*syrinx*” solution (1 specialist) :

U.S.A.	1
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The comments received from specialists in regard to the present case are reproduced in the immediately following paragraphs.

9. Support for the "adippe" solution received from B. J. Lempke (Amsterdam, The Netherlands) : On 28th September 1952 Dr. B. J. Lempke (*Amsterdam, The Netherlands*) addressed the following letter to the Office of the Commission in support of the present case (Lempke, 1952, *Bull. zool. Nomencl.* 9 : 131) :—

Thank you very much for the separates that you sent of the papers on the question of the *adippe*-nomenclature recently published in the *Bulletin* (1952, *Bull. zool. Nomencl.* 6 : 323—336).

I have carefully read the propositions put forward by you and the other authors, and my conclusion is that it would be a very wise deed of the International Commission if it were to accept the steps recommended. It would save a universally known name and make an end to much trouble.

10. Support for the "adippe" solution received from Felix Bryk (Naturhistoriska Riksmuseum, Stockholm, Sweden) : On 30th September 1952 Dr. Felix Bryk (*Naturhistoriska Riksmuseum, Stockholm, Sweden*) addressed a letter to the Office of the Commission in which he enclosed the following statement, giving his support to the present case (Bryk, 1952, *Bull. zool. Nomencl.* 9 : 132) :—

Es gereicht mir zur besonderen Ehre Ihrem Wunsche entgegenzukommen, indem ich zur von A. B. Klots and Cyril dos Passos vorgeschlagenen Beibehaltung des Tagfalternamens *Argynnis adippe* (L.) Stellung nehme.

Obwohl ich mir dessen bewusst bin, dass eine Durchschneidung von gordischem Knoten zur Lösung einer strittigen Frage in der Wissenschaft absolut zu verwerfen ist, dass, sohin jener Vorschlag bei eventueller Annahme zu einen Machtspruche führen würde da Linne's *Papilio adippe* (1767) ein ganz anderes Tier ist, wie das, welches es heute vorstellen soll, so kann ich trotzdem nicht umhin, mich restlos dem Vorschlage der beiden Herren Klots und dos Passos anzuschliessen.

Begründung : Der Synonymenkomplex für *cydippe-adippe* stellt einen derartigen komplizierten Rattenschwanz von Verworrenem, Labilem, Zweifelhaftem und Unsicherem dar, dass bei eventueller Wahl eines anderen existierenden Namens letzten Endes nur rechthaberische Dialektik den nomenklatorischen Zwist entscheiden könnte. Ich selbst habe in einem Artikel "Warum muss der Linnische Name für schwedische 'Cydippe' fallen?" (1950, *Ent. Tidskr.* 71 : 60—62) skeptisch gefragt, "ob nicht wieder ein anderer Revisionist einen anderen und noch älteren" (Namen als *phryxa* (Bergstr.)) aus dem Kehrlichthaufen abgelegter Synonyme ausgraben wird.

Zum Schlusse möchte ich noch auf die unrichtige Bildung des Namens "Adippe" hinweisen. John L. Heller hat in 1945, *Trans. of the American Philol. Association* 86 : 354 (Fussnote 54) über diesen Namen geschrieben : "No such mythological name is known to me. It is probably an arbitrary variant for Cydippe".

11. Support for the "adippe" solution received from B. C. S. Warren (Folkestone, England) : On 3rd October 1952, Mr. B. C. S. Warren (*Folkestone, England*)⁶ addressed the following letter to the Office of the Commission in support of the present case (Warren, 1952, *Bull. zool. Nomencl.* 9 : 132) :—

Many thanks for your separate on the *adippe* question (1952, *Bull. zool. Nomencl.* 6 : 323—336). I need scarcely say that I am very pleased both that the matter has been taken so far, and at the way in which you suggest dealing with it. The request, as set out in paragraph 9 of your paper in the *Bulletin*, seems to me not only satisfactory but also the only possible way of dealing with the matter.

12. Support for the "adippe" solution received from William T. M. Forbes (Cornell University, Ithaca, N.Y., U.S.A.) : On 7th October 1952 Dr. William T. M. Forbes (*Cornell University, Ithaca, N.Y., U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case (Forbes, 1952, *Bull. zool. Nomencl.* 9 : 133) :—

I have received from Mr. C. F. dos Passos the double paper on *niobe/adippe*, etc., which you wrote me about, a short time ago (*Bulletin of Zoological Nomenclature*, vol. 6, pp. 323—336).

It is really needless for me to remind you that my opinion is based not on the Code as such, but on what I consider the proper and useful result ; rather than, the machinery by which it is arrived at.

I think the proposed ruling would have completely the proper result.

I notice this is one of the rare cases where the "W.V." has really at least a rudimentary description of the species concerned, even though it comes in the form of a footnote on another species.

I question the advisability of establishing the species from one author, but citing a figure by another. At least I think there should be a *clear* indication in the *Opinion* that these two citations actually were by persons in close touch with each other, and may be presumed based on the same material.

⁶ Mr. B. C. S. Warren was living at Winchester at the time when consultations in regard to this case were begun in 1938.

I feel that in the presentation the genus name should be the sound and familiar genus, rather than a rather obscure splinter-genus, really representing only a fairly tangible species group.

I note that in the 1758 *Systema* Linnaeus undoubtedly included both forms, not merely the unsilvered one, for he writes not "pallido maculatis" as later, but "argenteis obsoletis", and again "maculis argenteis" even though it is only "posticarum 7 marginalibus", indicating much more silver than his later description.

In item (7) I view the word "unfortunately" as unfortunate. One must remember that at that time the Code was followed by very few zoologists, that there was no efficient means of establishing a "nomen conservandum", and that practically all good zoologists considered that where the use of the rules would have an unfortunate result on a well-established name it should be ignored pending revision of the machinery, if not the rules themselves. The action of Verity was not "unfortunate" but would have been almost unanimously viewed as highly proper; as I notice it would be even now by a recent writer in "Nature".

I consider two types of double-naming should be sharply separated; and the word "confusion" used only of a shift (one name for two species), not for plain cases of two names for one species; so I cannot accept the word "confusion" as applying to Poda's *berecynthia*, which after all has never been used effectively for but one species.

13. Support for the "adippe" solution received from Henry Beuret (Neuwelt, Basle, Switzerland): On 12th October 1952 Dr. Henry Beuret (*Neuwelt, Basle, Switzerland*) addressed the following letter to the Office of the Commission in support of the present case (Beuret, 1952, *Bull. zool. Nomencl.* 9 : 135):—

Je vous remercie cordialement de votre lettre du 20 écoulé accompagnée des pages 323—336 du *Bulletin of Zoological Nomenclature*, Vol. 6 (August, 1952).

Entre-temps, j'ai examiné ce cas en consultant les description originales et les figures citées dans le dit *Bulletin*.

Réflexions faites, je crois que l'on doit accepter les propositions que vous avez exposées aux pages 334—336. Si l'on veut conserver le mon "adippe", ce que me semble désirable, il n'est pas possible de trouver une autre solution. D'autre part, celle que vous proposez a l'avantage de régler aussi une fois pour toutes le cas de *Cethosia cydippe* L., 1767.

J'ai examiné surtout aussi *phryxa* Bergsträsser. Contrairement à l'opinion de Mr. Verity je ne crois pas que l'on puisse dire avec

certitude que les figs. 1 et 2, pl. 82 de Bergsträsser représentent le High Brown Fritillary ! C'est une raison de plus qui m'engage à recommander l'acceptation de votre solution soit *adippe* Schiffermüller et Denis.

Je vois que vous dites *adippe* " Schiffermüller et Denis " puis *adippe* " Denis et Schiffermüller ". Cela arrive aussi chez d'autres auteurs. Personnellement j'avais jusqu'ici cité seulement " Schiffermüller ".

N'y aurait-il pas lieu de recommander que l'on cite dorénavant " Schiffermüller et Denis " soit *Schiffermüller en premier lieu* et *Denis ensuite* ? Je crois qu'il n'y a pas de doute que Schiffermüller était le plus important des deux auteurs viennois ; on n'a qu'à consulter certains auteurs de la fin du 18^{ème} siècle et du début du 19^{ème} siècle pour s'en rendre compte. Il me paraît donc logique que Schiffermüller ait la première place. Qu'en dites vous ?

14. Support for the " adippe " solution received from Bryant Mather (Jackson, Mississippi, U.S.A.) : On 13th October 1952 Dr. Bryant Mather (*Jackson, Mississippi U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case (Mather, 1952, *Bull. zool. Nomencl.* 9 : 138) :—

Through the kindness of Mr. Cyril F. dos Passos I have received copies of reprints of three papers from vol. 6 of the *Bull. zool. Nomencl.* relating to the *niobe|cydippe|adippe* problem (pp. 323—336) and to *Papilio plexippus* (pp. 278—283) (Commission's references Z.N.(S.) 79 and 323).

It is my view that the recommendations contained in these papers are reasonable and, in the absence of compelling arguments to the contrary of which I have no knowledge, merit acceptance. I have no personal prior information on the *niobe|cydippe|adippe* problem, hence my opinion is based entirely on the statements contained in the two papers dealing with it. In the case of the use of the name *plexippus* for the North American " Monarch " my views are based on my personal familiarity with the insect itself, my desire to see the nomenclature stabilised, study of the papers that appeared in *Science* in 1951, and the statements in the reprint of the paper by Mr. dos Passos. I have before me three of the six figures offered for the Commission's choice by Mr. dos Passos. Those included in the works by Klots and Clark have the advantage of giving the locality from which the figured specimen came (Scranton, Pa., and Kendall, N.Y., respectively) while that in the work by Lutz has the advantage of being in color. It is therefore my feeling, as it apparently is that of Mr. dos Passos, that, if it is deemed advisable to refer to a figure, it is relatively immaterial which one of those suggested is cited—with the possible exception of that in the work by Catesby—for the reason stated by Mr. dos Passos.

15. Support for the "adippe" solution received from Ernest L. Bell (Flushing, N.Y., U.S.A.): On 14th October 1952 Dr. Ernest L. Bell (*Flushing, N.Y., U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case (Bell, 1952, *Bull. zool. Nomencl.* 9 : 136) :—

I have just received from Mr. Cyril F. dos Passos, separates of his joint paper (with Klots and Grey) and your joint paper (with Riley and Verity) on the *niobe-cydippe-adippe* problem and the suggested solution of it (*Bull. zool. Nomencl.*, vol. 6, pp. 323—336, 1952).

Mr. dos Passos has suggested to me that you would like to have my reaction to the proposed solution of this problem ; thus I am writing to say that I am in full agreement with and heartily endorse the procedure proposed to the International Commission as expressed in the papers referred to above.

16. Support for the "adippe" solution received from Eugene Munroe (Department of Agriculture, Division of Entomology, Ottawa, Canada): On 15th October 1952 Professor Eugene Munroe (*Department of Agriculture, Division of Entomology, Ottawa, Canada*) addressed the following letter to the Office of the Commission in support of the present case (Munroe, 1952, *Bull. zool. Nomencl.* 9 : 139—140) :—

I have recently received from Mr. C. F. dos Passos of Mendham, N.J., a reprint of pp. 278—283 of *Bull. zool. Nomenclature*, vol. 6, in which he proposes that the Commission modify its 1948 decision as to the application of the name *Papilio plexippus* Linnaeus, so as to delete reference to "the American species figured as *Danais plexippus* by Holland (W.J.), 1931, *Butterfly Book* as figure 1 on plate 7", substituting the words "the North American 'Monarch' butterfly".

Although I am in agreement with the proposed action as a palliative measure, I do not think it strikes at the root of the problem.

Since I believe that the practice of designating the application of scientific names by reference either to vernacular names or to figures of specimens that have no status or ambiguous status as types is fundamentally wrong and is at variance with the whole type concept, I can give only qualified approval to Mr. dos Passos's proposal, which I could support only as a temporary measure to remove an existing positive evil.

I wish further to draw attention to the extremely sweeping nature of the principle expressed in Paragraph 20 of Mr. dos Passos's submission. In that paragraph Mr. dos Passos appears to claim that,

because the decision to approve lectotypes was not taken until 1948, lectotype designations made prior to that time have no standing.

I do not believe that this principle is implicit in the decision of the Commission recognising lectotypes. Indeed, two considerations argue the reverse :

(a) The fact that parallel provisions for the selection of types of genera (Article 30) in the absence of an original designation have always been taken to be retroactive.

(b) The wording of the definition of lectotype (*Bull. zool. Nomenclature*, 4 : 186) is such as to include any published selection of a single type specimen from a series of syntypes subsequent to the original validation of the respective name.

If, however, I am wrong and Mr. dos Passos's contention is correct, it will automatically mean that almost all of the large number of "lectotypes" at present designated in literature and collections are from the standpoint of the rules spurious, and that a very large source of taxonomic confusion would be created.

It is with regret that I find myself unable to stand fully behind Mr. dos Passos's proposed solution to the *Papilio plexippus* problem, as there are already more than enough disagreements in the field of nomenclature.

17. Support for the "adippe" solution received from T. N. Freeman (Department of Agriculture, Division of Entomology, Ottawa, Canada) : On 16th October 1952 Dr. T. N. Freeman (*Department of Agriculture, Division of Entomology, Ottawa, Canada*) addressed the following letter to the Office of the Commission in support of the present case (Freeman, 1952, *Bull. zool. Nomencl.* 9 : 138) :—

I am in receipt of two letters from Mr. Cyril F. dos Passos of Mendham, N.J., who asked me if I would comment on his article in the *Bull. Zool. Nomenclature* which deals with the reconsideration of the case of *Papilio plexippus* Linn. (Z.N.(S.) 332), and also one with the Commission's reference Z.N.(S.) 79, which deals with two papers, one by Grey, Klots and dos Passos on the *niobe-cydippe-adippe* problem.

With regard to the *adippe* problem, I must say that I am in complete accord with the views and facts as outlined by Grey, Klots and dos Passos. I am also in accord with his views as outlined in his article on the *plexippus* problem with the exception that the suggestions would only solve the problem temporarily as outlined by Dr. Munroe of this Unit in his recent letter dated 15th October 1952.

18. Support for the “adippe” solution received from Elli Franz (Senckenbergische Naturforschende Gesellschaft, Frankfurt a. Main, Germany): On 22nd October 1952 Dr. Elli Franz (*Senckenbergische Naturforschende Gesellschaft, Frankfurt a. Main, Germany*) addressed the following letter to the Office of the Commission in support of the present case (Franz, 1952, *Bull. zool. Nomencl.* 9 : 136) :—

In Beantwortung Ihres Briefes, von 20.9.52 teile ich Ihnen mit, dass auch ich *Argynnis adippe* als gültigen Namen vorschlage.

19. Support for the “adippe” solution received from Ernst Mayr (The American Museum of Natural History, New York, U.S.A.): On 22nd October 1952 Professor Ernst Mayr (*The American Museum of Natural History, New York, U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case (*Mayr, 1952, Bull. zool. Nomencl.* 9 : 137) :—

I have been requested by Mr. C. F. dos Passos to “express my reaction to the application” relating to the *adippe* problem submitted under the reference number Z.N.(S.) 79.

After a careful study of *Bull. zool. Nomencl.*, vol. 6, pp. 323—336 I conclude that the petition will permit the best possible solution of this nomenclatorial tangle. The proposed solution will cause the least disturbance of the existing nomenclature, and this is clearly a case where the International Commission should use its Plenary Powers.

20. Support for the “adippe” solution received from Karl P. Schmidt (Chicago Natural History Museum, Chicago, Illinois, U.S.A.): On 5th November 1952 Dr. Karl P. Schmidt (*Chicago Natural History Museum, Chicago, Illinois, U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case (Schmidt, 1952, *Bull. zool. Nomencl.* 9 : 137) :—

With reference to the two applications to the Commission regarding the trivial names *niobe*, *cydippe*, and *adippe*, I wish to support the solution of Messrs. Grey, Klots, and dos Passos (Commission’s Reference Z.N. (S.) 79).

21. Support for the “adippe” solution received from Ralph L. Chermock (University of Alabama, Alabama, U.S.A.): On 9th

November 1952 Professor Ralph L. Chermock (*University of Alabama, Alabama, U.S.A.*) addressed a letter to the Office of the Commission commenting on two cases recently published in the *Bulletin of Zoological Nomenclature*. The passage relevant to the present case is as follows :—

I have studied the papers by L. P. Gray, A. B. Klots and C. F. dos Passos, and by F. Hemming and N. D. Riley, which were published in the *Bulletin of Zoological Nomenclature*, vol. 6, pp. 323—336, August, 1952 ; along with pertinent literature available to me. The solutions to the difficulty are essentially similar, and I am in thorough agreement with them. I urge that the recommendations be approved.

22. Support for the “ adippe ” solution received from Richard M. Fox (Colorado College, Colorado Springs, Colorado, U.S.A.) : On 18th November 1952 Dr. Richard M. Fox (*Colorado College, Colorado Springs, Colorado, U.S.A.*) sent the following letter to the Office of the Commission in support of the present case :—

Mr. dos Passos has sent me the two papers from the *Bulletin of Zoological Nomenclature* (Vol. 6, pp. 323—336) anent *niobe|cydippe|adippe*, the one by Grey, Klots and dos Passos, the other by Hemming, Riley and Verity. Here you find me in concurrence. There cannot be objection to the judicious and considered suppression of a name which stands in the way of clearing confusion—particularly when the name was originally associated with an inadequate description.

23. Support for the “ adippe ” solution received from N. Shoumatoff (Bedford, New York, U.S.A.) : On 20th November 1952 Dr. N. Shoumatoff (*Bedford, New York, U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case :—

I have read with interest the two papers (Gray, Klots, and dos Passos ; Hemming, Riley and Verity) with reference to the “ Niobe Fritillary ” and the “ High Brown Fritillary ” as published in the *Bulletin of Zoological Nomenclature*, Vol. 6 (August 1952) pp. 323—336. I would like to express to you my agreement with the views of the authors of these two papers.

24. Support for the “ adippe ” solution received from Ramon Agenjo (Instituto Español de Entomología, Madrid, Spain) : On 10th December 1952 Senor Ramon Agenjo (*Instituto Español de*

Entomologia, Madrid, Spain) addressed the following letter to the Office of the Commission in support of the present case :—

En respuesta a su carta de 20 de Septiembre de 1952 y despues de madure estudio de la cuestion propuesta en su carta, debo significarle mi opinion de lo importante que seria la conservacion del nombre de *Argynnis adippe* (Linnaeus, 1767) sobre el de *Argynnis cydippe* (Linnaeus, 1761). Es un claro caso en que debe aplicarse el poder plenario de la suspension de las Reglas de la Nomenclatura, porque la supresion del nombre de *adippe*, que es mucho mas popular que el de *cydippe*, produciria muchos trastornos a los especialistas acostumbrados a manejarlo.

25. Support for the “*adippe*” solution received from the Wiener Entomologische Gesellschaft, Wien, Austria : On 7th March 1953 Dr. Hans Reisser communicated to the Office of the Commission the following letter of support in the present case on behalf of the *Wiener Entomologische Gesellschaft, Wien, Austria* (Reisser, 1953, *Bull. zool. Nomencl.* 8 : 101) :—

By our member, Mr. Schwingenschuss, we have got your inquiry from 20th September 1952 about the question of nomenclature of the species *Argynnis adippe*. We beg to excuse the delay in answering.

Of course we agree with great pleasure that the name of *adippe* should be conserved. This case illustrates that the application of the strictest priority and exhumations of obsolete names only produces such a trouble, that it becomes necessary to use the vulgar denominations instead of the scientific ones in order to signify the real species is meant ! Our society would prefer the application of Heikertingers “principle of continuity” and we should be very glad, if it would become possible that a resolution of the authorities, treating with nomenclature problems, introduced this principle into practice.

26. Support for the “*adippe*” solution subject to the attribution of that name to Müller (P.L.S.) (1764) received from Otto Holik (Dresden, Germany) : On 14th December 1952 Dr. Otto Holik (*Dresden, Germany*) addressed a letter to the Office of the Commission in which he enclosed a statement on his views on the *adippe* problem. The statement so received is as follows :—

Dieses Problem betreffend ist auf ein Buch hinzuweisen, das von einem Zeitgenossen LINNE's geschrieben wurde. In den diese Frage behandelnden Veröffentlichungen im “Bulletin of Zoological Nomenclature” von Mr. Cyril F. dos Passos, Mr. Klots, Mr. Grey (Vol. 6, 1952, p. 323—325) und Mr. Hemming (Vol. 6, 1952, p. 325—336) wird auf dieses Buch nicht Bezug genommen. Es scheint keine grosse

Verbreitung erlangt zu haben. Selbst OCHSENHEIMER erwähnt es nicht, der beider Abfassung seines 1804 erschienenen Werkes "Die Schmetterlinge von Sachsen" die entomologische Literatur der Linné'schen Zeit ausführlich zitiert und zum Vergleich herangezogen hat. Es handelt sich um das Werk :

MULLER, Ph.L.St., "Des Ritters Carl von Linne, Königl. Schwedischen Leibarzes etc., vollständiges Natursystem der Insecten nach der zwölften lateinischen Ausgabe und nach Anleitung des holländischen Houttuyinischen Werks mit einer ausführlichen Erklärung". Nürnberg 1774 (1. Band, 758, p., 22 Taf.).

Das Werk ist nur acht Jahre nach Linné's "Systema Naturae, ed. XII" erschienen. Die Beschreibungen eines Teiles der Arten sind nicht ausführlicher als bei Linné und nur als Übersetzungen der Linné'schen kurzen Diagnosen zu werten. Das betrifft wahrscheinlich solche Arten, wo dem Verfasser die erforderlichen Vergleichsstücke fehlten. Wo solche vorhanden waren, sei es in seiner eigenen Sammlung oder in der Sammlung des Hofrates D. RUDOLF, wird er ausführlicher und deutlicher. Den "Papilio Adippe" (High Brown Fritillary) vergleicht er z.B. mit dem "Papilio Aglaja" (Dark Green Fritillary) wie folgt (p. 620) :

" 211. *Der Violenvogel. Papilio Aglaja*

Auf der dreyfärbigen Viole wird ein der neujorkischen Art nicht unähnlicher Schmetterling gefunden, welcher oben gelb und schwarz gefleckt, unter aber mit ein und zwanzig Silberflecken besetzt ist, die auf den Hinterflügeln stehen, denn die Vorderflügel haben nur vier verloschene Flecken. Hintenher sieht man auch zwey blinde and zwey rechte Augen mit einem Silberkern".

" 212. *Die Fleckenreihe. Papilio Adippe*

Es ist diese Art der vorigen fast gleich, denn die Flügel sind auch gelb mit schwarzen Flecken, jedoch unten mit drey und zwanzig Silberflecken besetzt, doch so, dass zwischen der letzten und folgenden Reihe noch eine Reihe rostfärbiger Flecken befindlich ist, die in der Mitte einen Silberkern führen, dergleichen man bei der vorigen Art nicht antrifft. Es hält sich diese Art in Europa, besonders in Schweden auf".

Soweit es sich um die Zeichnung der Unterseite der Hinterflügel handelt, folgt MULLER den Angaben LINNE's. Auch dieser gibt bei Papilio Aglaja an : "subtus maculis 21 argenteis". Bei Papilio Cydippe L. 1761 (= Adippe 1766) heisst es dagegen : "subtus maculis 23 argenteis". MULLER ergänzt aber die Angaben LINNE's in wesentlicher Weise. Durch die Hervorhebung des Unterschiedes zwischen den beiden Arten wird die Art, welche MULLER unter der Bezeichnung "Papilio Adippe" versteht, so genau charakterisiert,

dass kaum ein Zweifel an ihrer Identität mit dem "High Brown Fritillary" bestehen kann. Dass MULLER bei der Abfassung der Beschreibung wirklich den in England "High Brown Fritillary" genannten Falter vor Augen hatte und nicht den *Papilio Niobe* L. (*Niobe Fritillary*), geht aus Diagnose hervor, die er von der letzteren Art gibt. Er schildet sie (p. 622) ähnlich wie LINNE :

" 215. *Der Bastartsilbervogel. Papilio Niobe.*

Die Felcken sind unter sehr blass, und ausserdem zeigen sich drey Silberaugen in der Mitte, indem sieben im Rande stehen. Europa".

MULLER bezieht sich in seiner Arbeit nur auf LINNE'S "Systema naturae", ed. XII, 1766 (oder 1767?), nicht aber auf die früheren Schriften des gleichen Autors. Das geht daraus hervor, dass er die Artgleichheit von *Papilio Niobe* L. (1758), *Papilio Cydippe* L. (1761) und *Papilio Adippe* L. (1766) nicht erwähnt, wahrscheinlich auch nicht erkannt hat. Sicherlich war er auch der irrigen Auffassung, dass der von ihm beschriebene *Papilio Adippe* mit dem *Papilio Adippe* Linnaeus 1766 identisch sei. Er hat also in unbewusster Weise jene Art richtig beschrieben, die bisher mit der Bezeichnung *Argynnis* (oder *Fabriciana*) *adippe* belegt wurde. Daraus geht hervor, dass eigentlich ihm die Autorschaft für diese Art zugesprochen werden müsste.

Sollte die "International Commission on Zoological Nomenclature" die vorstehenden Ausführungen für richtig anerkennen, dann ist als Typenrasse der *Argynnis* (*Fabriciana*) *adippe* Müller die mitteldeutsche Rasse zu bestimmen. MÜLLER (Philipp Ludwig Statius Müller, nicht O. F. Müller oder C. L. v. Müller) wirkte als Professor der Naturgeschichte in Erlangen (Mittelfranken) und es ist als sicher anzunehmen, dass sein Untersuchungsmaterial aus diesem Gebiete stammte.

Ergänzend sei noch folgendes bemerkt :

Die von MÜLLER bei Beschreibung des *Papilio Aglaja* erwähnte "neujorkische Art" ist nach der Beschreibung (p. 620) und der Abbildung der Unterseite (Taf. XIX, Fig. 6) *Argynnis idalia* Drury. Sie wird aber von Müller nicht mit einem Namen belegt, dürfte also auch in dem nicht vorliegenden holländischen Wek von Houttuyin, das MÜLLER als Quelle zitiert, nicht benannt worden sein.

Die Autorschaft LINNE'S für *Argynnis* (*Fabriciana*) *adippe* wird von den älteren deutschen Autoren nicht anerkannt. OCHSENHEIMER (l.c., 1804) zitiert in erster Linie Hübner. Linné führt er sowohl bei dieser Art als auch bei *Papilio niobe* nur mit Fragezeichen (?) unter den Synonyma an.—HEYDENREICH (System. Verz., 1851) spricht die Autorschaft an *Argynnis adippe* ebenfalls Hübner zu. Als Synonyma gibt er an : *Phryxa* Bergsträsser, *Aspasia* Borkhausen,

Liriope Borkhausen, Aspasius Heebst, Adippina Scriba und Bercynthia Poda.—Keferstein (Entomol. Zeitung, Stettin 1851, p. 248) nennt bei *A. adippe*, niobe und aglaja Ochseneimer als Autor.—LEDERER (Verhandl. d. Zoolog. botan. Vereins, I., Wien 1852, p. 22) gibt als Autoren Denis und Schiffermüller an (*Argynnis adippe* SV.), allerdings nach dem erst 1776 erschienenen "Systematischen Verzeichnis (SV) der Schmetterlinge der Wiener Gegend u.s.w." und nicht nach der schon 1775 erschienenen "Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend". Lederer befindet sich also, was die Persönlichkeiten der Autoren betrifft, in Übereinstimmung mit den Verfassern der angeführten Veröffentlichungen im "Bull. of Zoological Nomenclature", Vol. 6, 1952, p. 323—336.

27. Adoption of the specific name "phryxa" Bergstrasser, [1783], for the High Brown Fritillary advocated by Jiří Paclt (Slovak Academy of Sciences, Bratislava, Czechoslovakia): On 29th September 1952 Dr. Jiří Paclt (*Slovak Academy of Sciences, Bratislava, Czechoslovakia*) addressed the following letter to the Office of the Commission advocating the adoption of the specific name *phryxa* Bergstrasser, [1783], for the High Brown Fritillary (Paclt, 1952, *Bull. zool. Nomencl.* **9** : 131) :—

In accordance with a demand received from the Secretary of the International Commission on Zoological Nomenclature, I refer to the two proposals relating to the *niobe/cydippe/adippe* problem published in August 1952 (*Bull. zool. Nomencl.* **6** : 323—336).

The authors of the proposals above mentioned recommend that the trivial name *adippe* [Denis & Schiffermüller], 1775 (as published in the binominal combination *Papilio adippe*) be placed on the *Official List of Specific Trivial Names in Zoology*. This specific trivial name is thus proposed to be validated for the "High Brown Fritillary", a species figured by Esper in 1777, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen*, **1**(3) : pl. 18, fig. 1.

Recently the problem of the valid name for the "High Brown Fritillary" has been discussed by several authors. Personally, I came to the conclusion that the only valid name for that species is *Brenthis* (subg. *Fabriciana*) *phryxa* (Bergstraesser, [1783]); this opinion (published in 1947 in *Miscel. ent.* **44** : 98) has been followed by G. Bernardi, C. Herbulot and J. Picard in their "*Liste des Grypocères et Rhopalocères de la Faune française conforme aux Règles internationales de la Nomenclature*" (1950, *Rev. franc. Lépid.* **12** : 332) as well as by R. Schwarz in his standard work on the Lepidoptera of Czechoslovakia (for further details see F. Bryk, 1950, *Ent. Tidskr.* **71** : 60—62). Now, at the time of writing this comment I see no reason to change my original opinion.

Owing to the absolutely confused use of the names *adippe* and *cydippe* both in the past and modern literature I think it would be appropriate to abandon every attempt to save at any price a name which never had been used universally, i.e. *adippe*.

28. Adoption of the "phryxa" solution advocated by G. Bernardi (Muséum National d'Histoire Naturelle, Paris): On 29th June 1953 Dr. G. Bernardi (*Muséum National d'Histoire Naturelle, Paris*) furnished the Office of the Commission with the following statement in which he advocated the adoption of the *phryxa* solution:—

Je me permets de ne pas approuver entièrement les suggestions de L. P. Gray, A. B. Klots et C. F. dos Passos (1952, *Bull. zool. Nomencl.* 6 : 323—325) ainsi que les propositions de F. Hemming, N. D. Riley et R. Verity (1952, *loc. cit.*: 325—336) au sujet du nom trivial spécifique devant être appliqué au "High Brown Fritillary".

(1) La détermination du nom correct de ce papillon ne justifie pas à mon avis les multiples et complexes suspensions des *Règles internationales de Nomenclature Zoologique* suggérées ou proposées par les auteurs cités ci-dessus. Il est eu effet essentiel de noter que pour conserver au "High Brown Fritillary" le nom "familial" d'*adippe* la Commission Internationale de Nomenclature Zoologique devra entre autre :

(a) placer sur l'*Official Index of Rejected and Invalid Specific Names in Zoology* le nom *cydippe* L., 1767, ce nom est valable pour désigner une forme du "High Brown Fritillary" étant accompagné d'une excellente description originale ainsi que du "type". L'un des auteurs déjà cités (Verity, 1913, *Linn. Soc. Journ. (Zool)* 32 : 182) a en effet précisément eu le mérite de démontrer que la "Linnaeus description agrees in every respect with the specimen labelled by him "cydippe" tandis que le specimen "which bears this name in Linnaeus handwriting . . . in every respect is unmistakably of Linnaean origin".

(b) enteriner au morjeu d'un artifice de procédure une erreur de synonymie et de taxonomie de Denis et Schiffermüller, 1775 qui emploient le nom *adippe* L., 1767 (eu fait synonyme de *cydippe* L., 1761) pour désigner une espèce que Linné n'a jamais décrite.

(2) Le problème *niobe/cydippe/adippe* se réduit à mon avis à rechercher quel est le nom le plus ancien valable pour désigner le "High Brown Fritillary" l'intervention de la Commission Internationale de Nomenclature Zoologique devrait être limitée à la décision de placer sur l'*Official Index of Rejected and Invalid Specific Names in Zoology* les *nomina dubia* eventuels. L'élimination des *nomina dubia*, cause

d'instabilité de la nomenclature zoologique, a retenu à juste titre l'attention de la Commission Internationale ainsi que l'a dernièrement précisé Hemming (1948, *Int. geol. Congress*, Eighteenth Session 15 : 7—8). Il me semble toutefois que l'élimination d'un nom en tant que *nomen dubium* n'est pas seulement une question de nomenclature mais également de taxonomie. Cette élimination ne devrait donc pas être décidée avant l'examen d'une série de "topotype" des différentes espèces aux quelle ce nom pourrait être éventuellement appliqué. Le fait que devers auteurs ont employé un nom dans des sans différents ne prouve pas nécessairement qu'il s'agit d'un *nomen dubium* mais peut signifier simplement que ces auteurs n'ont pas su utiliser complètement les données de la description originale et n'ont pas disposé d'un matériel de comparaison suffisant. Il suffira de rappeler ici le cas de *Lycaudes argyrognomon* Bergstr. dont la nomenclature ne présente plus aucune difficulté pour tous les auteurs modernes depuis Beuret mais que a été longtemps instable.

En ce qui concerne problème *niobe/cydippe/adippe* je n'ai pas d'opinion au sujet du nom *berycynthia* Poda mais les doutes exprimés au sujet du nom *phryxa* Bergstr. dans les propositions signées F. Hemming, N. D. Riley et R. Verity ne me paraissent pas justifiés. Le fait que Werneburg (1864, *Beitr. Schmett. Kund Z.* : 69) à considéré que les figures de *Papilio phryxa* Bergstr. représentent le "Niobe Fritillary" ne constitue pas à mon avis un argument décisif. Cet auteur a certainement effectué un excellent travail en matière de nomenclature (reconnaissant par exemple le sens exact des noms *hippotoë* L., *arbitulus* de Prunn., *televis* Bergstr, Lep. LYCAENIDAE) mais il suffira de rappeler avec Beuret (1933, *Lamb* 33, (6) : 136) que l'on utilise actuellement le nom *glandon* de Prunn. pour désigner un *Agriades* tandis que Werneburg appliquait ce nom à la ♀ d'*Everes argiades* Pallas. En outre l'un des auteurs de la note référencée Z.N.(S.) 79 (Verity, 1929, *Bull. Soc. ent. Fr.*, 1929 : 277—280) à précisément montré que les figures 1 et 2 de *phryxa* Bergsträsser "ne laissent aucun doute qu'il s'agisse de l'espèce connue jusqu'ici sous le nom d'*adippe*". Il a abandonné ce nom (1930, *Ent. Rec.*, 42 : 149—152 et 1950, *Farf. Ital.* 4 : 190) que par suite d'une interprétation des Règles non conforme aux décisions du Congrès Zoologique de Paris, 1948 et nullement pour un motif taxonomique.

La comparaison de la ♀ figurée par Bergsträsser avec les *adippe* Auct. et les *niobe* herse Hufu. du Laboratoire d'Entomologie du Muséum de Paris provenant d'Allemagne septentrionale (mais malheureusement pas, due comté de Hanan) concorde à mon avis avec le point de vue exprimé par Verity (*loc. cit.*). Ou notera entre autre sur les deux figures représentant cette ♀ : 1. la réduction du sensus basal fougé du dessus des autérieures—2. l'absence d'espace clair pupillé de noir à la base de la cellule au revers des pastérieures. Les ♀ allemandes de *niobe* paraissent au contraire caractères par le

dessus plus ou moins sombre et par la présence d'un espace clair presque toujours pupillé de foucé à la base de la cellule au revers des postérieures.

En résumé :

(1) J'ose espérer que la Commission Internationale de Nomenclature Zoologique ne nous obligera pas à entériner en pratique l'erreur de Denis et Schiffermüller. Le fait que cette erreur a été de longue durée et très répandue ne constitue évidemment pas un argument en sa faveur.

(2) L'emploi du nom *phryxa* Bergstr. ne présente pas à mon avis un danger de "greater confusion than uniformity".

La nomenclature du "High Brown Fritillary" ne mérite donc guère l'emploi des "pleins pouvoir". Ou rappellera ici qu'Hemming lui-même (1942, *Proc. Roy. ent. Soc. Lond.* **11**(11) : 156) à précisément montre pour une espèce voisine (*Mesoacidalia charlotta Hawaglaja* L.) que "the suppression of a well-known name . . . but causing inconvenience is a very different thing from causing greater confusion than uniformity" et que de tels cas ne méritent pas la suspension des Règles. Ou notera du reste que le nom *phryxa* Bergstr. tend à remplacer le nom *adippe* Auct. parmi les auteurs européens depuis le travail de Paclt (1947, *Misc. Ent.*, 1947 **69**(6):97) adopté par exemple par Schwartz (Motyle, II) et dans la Liste des Rhopalcécères français conforme aux Règles internationales de la Nomenclature (1950, *Rev. Franc. Lep.*, **12** : 332). Le rejet du nom *phryxa* sans sérieux étude taxonomique des *Fabriciana* du Hanau est donc injustifié.

29. Adoption of the specific name "syrinx" Borkhausen, 1788, for the High Brown Fritillary advocated by F. Martin Brown (Colorado Springs, Colorado, U.S.A.): On 11th October 1952 Dr. F. Martin Brown (*Colorado Springs, Colorado, U.S.A.*) addressed the following letter to the Office of the Commission in which he advocated the adoption of the specific name *syrinx* Borkhausen, 1788, for the High Brown Fritillary (Brown, 1952, *Bull. zool. Nomencl.* **9** : 134) :—

Mr. C. F. dos Passos recently sent to me copies of the papers devoted to Commission's reference Z.N.(S.)79 (*Bull. zool. Nomencl.*, vol. **6**, pp. 323—336). I am not familiar enough with the insects in question to voice a valid opinion in this case. A careful reading of the arguments impresses upon me the complexity of the problem. As I understand it this is the problem :

1758, Linnaeus called the "Swedish Fritillary" *niobe* ;

1761, Linnaeus called the silvered form of the "Swedish Fritillary" "*cydippe* ;

1767, Linnaeus renamed the silvered form of the "Swedish Fritillary" *adippe* ; and re-applied *cydippe* to an Oriental Cethosiid.

adippe has generally been applied to the "High Brown Fritillary" in error.

Verity's stand that *adippe* Linnaeus, 1767, does not invalidate *adippe* Denis & Schiffermüller, 1775, is invalid because Linnaeus did not recognise *adippe* as an infra-subspecific variant.

So far as alternate names for the "High Brown Fritillary" are concerned, *berecynthia* Poda, 1791, cannot be recognised with certainty ; *syrinx* Borkhausen, 1788, is an abnormal form figured by Esper ; *esperi* Verity, 1913, was applied to the normal form figured by Esper ; *phryxa* Bergsträsser, 1783, may in part represent *niobe* and in part the "High Brown Fritillary".

As I see it there are two possibilities that there is a valid name for the "High Brown Fritillary"—*phryxa* Bergsträsser, 1783, and *syrinx* Borkhausen, 1788. My personal reaction would be to concentrate upon the identity of these. I should think that the opinions of recognised authorities might settle the question of what species is intended by Bergsträsser on Pl. 82, figs. 1, 2, 3. If these gentlemen consider that none of the three figures represents the "High Brown Fritillary" then the name should be rejected for that species, but only then.

If *phryxa* is rejected then it must be decided that *syrinx* Borkhausen applies to the "High Brown Fritillary" since it is the earliest name that can be recognised as applying to the species—even though the type figure is of an aberrant specimen. The name *syrinx* was published as a binominal. It thus has the status, for nomenclatorial purposes, of a specific name.

While I am in agreement with the idea behind the *Official List of Specific Trivial Names in Zoology* I am not in agreement with the use of the Plenary Powers for this valuable implement except as a last resource. That the use of *syrinx* Borkhausen may cause some to be disgruntled should not be considered. We are trying to establish a nomenclatorial system for all time and to do so must be disturbing to some one at each change toward stability. Certainly many of us in America regretted to see some of our "old names" disappear—in *Boloria* for instance—but we are managing to survive. Unless the thesis of priority is eliminated entirely from the *Règles* I believe every effort must be made to support it.

30. Supplementary Note by Francis Hemming on the authorship attributed to the application submitted to the work published in 1775 under the title “Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend” : On 17th November 1952 Mr. Francis Hemming (one of the applicants in the present case) submitted the following note setting out the reasons which had influenced Mr. Riley, Dr. Verity and himself in the choice of the method to be adopted in citing the names of the zoologists who were known to be the authors of the work published anonymously in 1775 under the title *Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend* (Hemming, 1952, *Bull. zool. Nomencl.* 9 : 135) :—

In his letter of 12th October 1952 supporting the proposed use of the Plenary Powers to validate the trivial name *adippe* as published in the combination *Papilio adippe* in the anonymous work published in Vienna in 1775 under the title *Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend* M. Henry Beuret raised the question why, in the application in regard to the foregoing case submitted jointly by Mr. N. D. Riley, Dr. Roger Verity and myself, new names published in the foregoing work were attributed to “Denis & Schiffermüller” and not, as is more commonly done, to “Schiffermüller & Denis”.

We considered this question when we were preparing our application to the Commission, and it seemed to us that in a formal document of this kind it would be better if we were to follow the accepted convention for the citation of the names of the authors of a book published anonymously, that is, to cite those names in alphabetical order. Sometimes, as here, the adoption of this convention has the result that it gives the first place to the less important of the authors concerned. It has, however, the advantage that it provides a standard method for the citation of the names of authors of anonymous books that would otherwise be unattainable.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

31. Issue of Voting Paper V.P.(54)46 : On 24th March 1954 a Voting Paper (V.P.(54)46) was issued in which the Members

of the Commission were invited to vote either for, or against, "the proposal relating to the specific name to be used for the 'High Brown Fritillary' Butterfly, as set out in Points (1) to (3) in paragraph 9 on pp. 334 to 336 in Volume 6 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in paragraph 2 of the present *Opinion*].

32. The Prescribed Voting Period for Voting Paper V.P.(54)46 :

As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 24th June 1954.

33. Particulars of the Voting on Voting Paper V.P.(54)46 :

At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(54)46 was as follows :—

(a) *Affirmative Votes had been given by the following nineteen (19) Commissioners (arranged in the order in which Votes were received) :*

Riley ; Holthuis ; Lemche ; Hering ; Vokes ; Bonnet ;
Dymond ; Esaki ; Boschma ; Jaczewski ; Hemming ;
Bradley (J.C.) ; do Amaral ; Hankó ; Pearson ; Stoll ;
Cabrera ; Sylvester-Bradley ; Mertens ;

(b) *Negative Votes :*

None ;

(c) *Voting Papers not returned :*

None.

34. Declaration of Result of Vote on Voting Paper V.P.(54)46 :

On 26th June 1954, Mr. Hemming, Secretary to the International

Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(54)46, signed a Certificate that the Votes cast were as set out in paragraph 33 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

35. Designation jointly by Francis Hemming, N. D. Riley and Roger Verity of a neotype for the nominal species "Papilio adippe" [Denis & Schiffermüller], 1775, and submission by those specialists of a request that the neotype so designated be taken as the standard of reference for the interpretation of the foregoing nominal species : In May 1955 a communication was received in the Office of the Commission from the three specialists (Francis Hemming ; N. D. Riley ; Roger Verity) by whom the application in the present case had been originally submitted, intimating that, having regard to the decision to recognise the concept of neotypes taken, since the submission of their application for the use of the Plenary Powers for the purpose of validating and interpreting the name *adippe* as the specific name to be used for the butterfly known as the High Brown Fritillary, they were now of the opinion that the best method of securing this end would be by the validation by the Commission under the above Powers of a neotype which they proposed to designate for the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775. The applicants explained that they were in communication with Dr. Hans Strouhal, the Director of the Naturhistorische Museum at Vienna with a view to obtaining with his assistance a suitable specimen of the High Brown Fritillary taken in the neighbourhood of that city, a specimen of this provenance being, in their opinion, the most suitable for designation as the neotype of the above species, having regard to the fact that, as indicated by the title of the celebrated work by Denis & Schiffermüller as from which they had asked that the name *Papilio adippe* be validated, that work was concerned solely with the Lepidoptera occurring in the "Wiener Gegend". The applicants indicated that it might be some time before they would be in a position to designate the proposed neotype and they asked that in the circumstances no further action on their original application be taken by the Commission until they had been able to submit their proposed Supplementary Application. On

20th August 1957 Mr. Hemming, on behalf of his colleagues and himself addressed a letter to the Office of the Commission (1) stating that a specimen taken at Mödling in the Vienna neighbourhood preserved in the Naturhistorische Museum, which had been lent for description to the British Museum (Natural History), had now been designated to be the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775, and (2) submitting a Supplementary Application, to which was annexed the document in which the neotype had been designated, asking permission to vary the application which they had originally submitted in this case in such a way as to provide that the nominal species *Papilio adippe*, validated under the Plenary Powers as the name for the High Brown Fritillary, be interpreted by the neotype now designated instead of, as originally proposed jointly (a) by the designation under the Plenary Powers of the "Wiener Gegend" to be the locality to be taken as the type locality and (b) by reference to the figure of a male specimen published by Esper in 1777 as figure 1 on plate 18 of the work *Die Schmetterlinge*. In making this proposal, the applicants drew attention to the fact that in essence it differed in no respect from that submitted in their original application but that it was, in their opinion, greatly superior in form, for under it the specimen to be taken as the standard of reference for the nominal species in question would be one actually taken in the Vienna district instead of a specimen taken in Germany—probably in the neighbourhood of Erlangen—which under their original proposal would have been the standard specimen so prescribed. The applicants pointed out that the procedure now recommended had the further advantage that it rendered possible the publication of photographs of the upperside and underside of the standard specimen and in addition made it possible to publish photographs of a preparation of the male genitalia of that specimen for comparison with the male genitalia of the nominal species *Papilio niobe* Linnaeus, 1758, the nearest allied species and the one to which the name *Papilio adippe* had actually been given by Linnaeus in 1767 and to which that name properly applied up to the time of its suppression under the Plenary Powers as asked for in their original application. The Supplementary Application so submitted, together with the annexed description of the neotype designated for *Papilio adippe* [Denis & Schiffermüller], 1775, and the three accompanying plates, is annexed to the present *Opinion* as an Appendix.

36. Submission to the Commission of a revised proposal asking that the method to be prescribed for the interpretation of the nominal species "Papilio adippe" [Denis & Schiffermüller], 1775, be by reference to the neotype for that species designated jointly by Francis Hemming, N. D. Riley and Roger Verity : Upon the receipt of the Supplementary Application submitted jointly by Mr. Francis Hemming, Mr. N. D. Riley and Dr. Roger Verity reproduced in the Appendix to the present *Opinion*, in which those specialists asked that the Commission should prescribe that the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, be interpreted by reference to the neotype designated for that species by the applicants instead of (as previously proposed) partly by the designation of the "Wiener Gegend" as the type locality for that species and partly by reference to a specified figured published by Esper in 1777 in the work entitled *Die Schmetterlinge*, the Secretary prepared on 22nd August 1957 a Report explaining the developments which had occurred in this case since the vote taken by the Commission on Voting Paper V.P.(54)46 and recommending that approval be given to the revised proposals now placed before the Commission. The Report so prepared, which was submitted to the Commission on 26th August 1957, was as follows :—

Proposed modification of the form of a part of the decision taken under the Plenary Powers on Voting Paper V.P.(54)46 for the purpose of stabilising the specific name to be used for the species of butterfly known in England as the "High Brown Fritillary"

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present Report is to place before the International Commission on Zoological Nomenclature a request which has been received from the applicants concerned for a slight modification of the form of the decision on the question of the specific name to be used for the species of butterfly known in England as the "High Brown Fritillary" taken by the Commission in June, 1954 by its Vote on Voting Paper V.P.(54)46.

2. The decision referred to above was taken in the light (a) of an application submitted jointly by Hemming (F.) (*London*), Riley (N.D.) (*London*) and Verity (R.) (*Florence*) (1952, *Bull. zool. Nomencl.* 6 : 325—336) and (b) of an associated application submitted jointly by Gray

(L.P.) (*Lincoln, Maine*), Klots (A.B.) (*New York*) and dos Passos (C.F.) (*New York*) (1952, *ibid.* 6 : 323—325).

3. It will be recalled that the central feature of the problem arising in this case was that for about 150 years (i.e. from 1767 to 1913) the High Brown Fritillary was universally known by the specific name *adippe* Linnaeus, 1767, but that in 1913, Verity, after examining the Linnean collection in London pointed out that the specific name *adippe* had been given by Linnaeus not (as had always been believed) to the "High Brown Fritillary" but to a closely allied species, the "Niobe Fritillary", to which in 1758 he had already given the specific name *niobe*. In the paper referred to above Verity discussed various old names which had been given—or were reputed to have been given—to the High Brown Fritillary and concluded that the nominal species concerned could not be identified with certainty and therefore that there was no available name for this species, to which he then gave the new name *esperii*. Verity's conclusions were not immediately accepted and the name *esperii* Verity had not come into use when in 1916 the British National Committee on Entomological Nomenclature issued a Report in which it rejected those conclusions but pointed out that the name *adippe* Linnaeus, 1767, was no more than a junior objective synonym of *cydippe* Linnaeus, 1761, a name which till then was virtually unknown in the literature. Thereupon opened a long period of confusion and doubt. Most workers continued to use the admittedly invalid name *adippe* Linnaeus, 1767, while others—a constantly dwindling number who accepted the views of the above Committee—used the equally incorrect name *cydippe* Linnaeus. Those specialists who realised that neither of the above names applied to the High Brown Fritillary were, however, in a great difficulty, for there was no alternative name which could be applied to this species with confidence, the next names in order of priority all being unsatisfactory, it not being possible to be certain that they applied to the High Brown Fritillary and not to the Niobe Fritillary. The names in question were : (a) *berecynthia* Poda, 1761 ; (b) *phryxa* Bergsträsser, [1783] ; (c) *syrix* Borkhausen, 1788. Each, however, secured some following, thereby adding to the state of confusion regarding the name to be used for this species.

4. At the time when the applications referred to in paragraph 2 above were submitted to the International Commission it had become evident that only the most drastic action could provide a stable nomenclature for the High Brown Fritillary which at that time was currently known by no less than five different names (*adippe* ; *cydippe* ; *berecynthia* ; *phryxa* ; *syrix*). The recommendation then submitted to the Commission was that by a series of decisions taken under the Plenary Powers it should secure that the oldest available name for this species should be *adippe* [Denis & Schiffermüller], 1775, a name which had undoubtedly been applied to the High Brown Fritillary, the adoption of which would not only provide a firm basis for the name

for the High Brown Fritillary but would in addition assure to it the specific name by which it had for so long been known and by which it was still most generally called. At the same time the Commission was asked to direct that the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, so validated, should have as its type locality the "Wiener Gegend", that being the locality from which all the species named by Denis & Schiffermüller in the so-called "Wiener-Verzeichniss" were obtained. Finally, in order to put the identification of the above nominal species on an unassailable basis the Commission was asked to direct that it be identified by reference to a good figure of almost contemporary date published by Esper in 1777 (pl. 18, fig. 1).

5. The application so submitted secured a very favourable reception, being supported by 18 out of the 21 specialists who furnished comments on it.

6. By its vote on Voting Paper V.P.(54)46 the foregoing and associated proposals were unanimously approved by the entire membership of the International Commission.

7. In the supplementary request now received the applicants explain that the form of the decision which they had asked for and which had been granted by the Commission in the foregoing vote had been influenced by the fact that at that time neotypes were not officially recognised in the *Règles* and that, if such types had then been recognised, they would have asked that the Commission, when defining the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, under the Plenary Powers, should do so by approving a neotype consisting of a specimen obtained in the Vienna district. In the circumstances in which the applicants then found themselves, they had not, however, felt free to make such a proposal. It was for this reason that they had adopted a course as nearly equivalent to the designation of a neotype as was practicable at that time—by asking (i) that the "Wiener Gegend" should be designated as the type locality of this species and that its identification should rest upon a figure (Esper's fig. 1 on pl. 18) which not only represented the High Brown Fritillary but which also was considered to represent a specimen of the subspecies occurring in the Vienna district. In their present note the applicants go on to express the view that in the circumstances created by the decision of the Fourteenth International Congress of Zoology, Copenhagen, 1953, to recognise the "neotype" concept it would be more satisfactory if the form of the decision taken by the Commission by its vote on Voting Paper V.P.(54)46 (paragraph 6 above) were modified so as to provide that the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, as validated by the above vote, should be defined by reference to a neotype consisting of a specimen obtained in the Vienna district rather than by reference to the specimen figured by Esper, the exact provenance of which is not known. The applicants go on to state that, in their view, there is no reason to doubt that Esper's specimen belongs to the same subspecies as that occurring at Vienna but express

the view that in a matter of this kind it is desirable that no possible element of subjective taxonomic judgment should enter into the form of the decision to be recorded and therefore that it would be better that, as this nominal species is to have the "Wiener Gegend" as its type locality, its identification should rest exclusively upon a specimen obtained in the Vienna district.

8. Accordingly, as the result of correspondence between the British Museum (Natural History) and the Naturhistorische Museum, Vienna, the latter institution provided to the British Museum on loan a number of specimens of the High Brown Fritillary obtained in the Vienna district. One of these—a male obtained at Mödling, near Vienna, on 23rd July 1921—is designated as the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775, in the Supplementary Application now received. At the moment that specimen is still in the British Museum but, as soon as a decision has been taken by the Commission on the Supplementary Application now under consideration, it will be returned to the Naturhistorische Museum at Vienna.⁷ Full particulars are given in the application regarding the labels attached to the neotype and other relevant matters. Finally, there are annexed to the application photographs of the upper- and under-surfaces of the neotype, of preparations of the male genitalia of that specimen with a corresponding photograph of the male genitalia of *Papilio niobe* Linnaeus, 1758, the closest ally of *Papilio adippe* [Denis & Schiffermüller], 1775, and photographs of preparations of the female genitalia of both these species.

9. For the reasons briefly summarised above, the applicants in the Supplementary Application now submitted ask that in the Ruling to be prepared giving effect to the decision taken on Voting Paper V.P.(54)46 the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, as validated by the vote so taken, be defined by the neotype designated in the Annexe to the Supplementary Application now submitted—a male specimen belonging to the Naturhistorische Museum, Vienna, taken at Mödling near Vienna on 23rd July 1921—instead of, as previously proposed, jointly (a) by the designation of the "Wiener Gegend" as the type locality and (b) by reference to the figure of a male specimen published by Esper in 1777 as figure 1 on plate 18 of the work entitled *Die Schmetterlinge*.

37. Issue of Voting Paper V.P.(O.M.)(57)14 : On 26th August 1957 a Voting Paper (V.P.(O.M.)(57)14) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal that in one respect the form of the decision in regard to the name *Papilio adippe* [Denis & Schiffermüller],

⁷ The neotype of *Papilio adippe* [Denis & Schiffermüller], 1775, was returned to the Naturhistorische Museum by the British Museum (Natural History) on 15th October 1957.

1775, taken on Voting Paper V.P.(54)46 [the operative portion of which is quoted in paragraph 31 of the present *Opinion*] be modified as recommended in paragraph 9 of the paper bearing the Registered Number Z.N.(S.) 79 submitted by the Secretary simultaneously with the present Voting Paper [i.e. in the paragraph numbered as above in the paper reproduced in paragraph 36 of the present *Opinion*].

38. The Prescribed Voting Period for Voting Paper V.P.(O.M.) (57)14 : As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 26th September 1957.

39. Particulars of the Voting on Voting Paper V.P.(O.M.) (57)14 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.) (57)14 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-four (24) Commissioners (arranged in the order in which Votes were received) :* ⁸

⁸ In the period between the issue of Voting Paper V.P.(54)46 and that of Voting Paper V.P.(O.M.) (57)14, Dr. Joseph Pearson retired from the Membership of the Commission. During the same period the following zoologists were elected to be Commissioners :—

Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (12th August 1953)

Dr. K. H. L. Key (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. Miller (*Museum of Vertebrate Zoology, University of California, U.S.A.*) (29th October 1954)

Doc. Dr. Ferdinand Prantl (*Národní Museum V Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. Bodenheimer (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst Mayr (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico Tortonese (*Museo di Storia Naturale "G. Doria", Genova, Italy*) (16th December 1954)

Lemche ; Holthuis ; Riley ; Vokes ; Mertens ; Miller ;
Hering ; Esaki ; Stoll ; do Amaral ; Hankó ; Key ;
Tortonese ; Prantl ; Hemming ; Cabrera ; Dymond ;
Bradley (J.C.) ; Jaczewski ; Kühnelt ; Bodenheimer ;
Bonnet ; Mayr ; Boschma ;

(b) *Negative Votes* :

None ;

(c) *On Leave of Absence, one (1)* :

Sylvester-Bradley ;

(d) *Voting Papers not returned* :

None.

40. Declaration of Result of Vote on Voting Paper V.P.(O.M.) (57)14 : On 27th September 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(57)14, signed a Certificate that the Votes cast were as set out in paragraph 39 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

41. Addition of "Fabriciana" Reuss, 1920, to the "Official List of Generic Names in Zoology" : On 30th September 1957 the Secretary, on receiving the following letter dated 29th September 1957 from Mr. Hemming on behalf of himself and of the specialists who had joined with him in submitting the present case to the Commission, executed a Minute directing that under the "Completeness-of-Opinions" Rule (1) the generic name

Fabriciana Reuss, 1920, as a name entering into the present case, be placed on the *Official List of Generic Names in Zoology* and (2) that in the entry to be made on the *Official List of Specific Names in Zoology* relating to the specific name *niobe* Linnaeus, 1758, as published in the combination *Papilio niobe*, a note be added that that name is the specific name of the type species of the genus *Fabriciana* Reuss, 1920 :—

Supplementary application dated 29th September 1957

By FRANCIS HEMMING, C.M.G., C.B.E.

(London)

**Proposed addition to the “ Official List of Generic Names in Zoology ”
of the generic name “ Fabriciana ” Reuss, 1920**

On behalf of my colleagues and myself I write to express the hope that in the *Opinion* to be rendered by the International Commission in regard to our request for the validation of the name *Papilio adippe* [Denis & Schiffermüller], 1775, as the name for the High Brown Fritillary Butterfly, the Commission will take the opportunity to place on the *Official List of Generic Names in Zoology* the generic name *Fabriciana* Reuss, 1920, the type species of which by original designation is *Papilio niobe* Linnaeus, 1758, a nominal species which, it will be recalled, enters to an important degree into the case which we submitted for decision. We feel that the decision to be taken in this case would be lacking in completeness if no action were to be taken in regard to the above generic name which we should add is now used for the two foregoing species by all specialists, other than those who still accept the old genus *Argynnis* Fabricius, 1807, in its former comprehensive sense.

2. The generic name *Fabriciana* was published by Reuss as a new name twice, first in October 1920 (*Ent. Mitt.* 9 : 192 *nota*) second in 1922 (*Arch. Naturgesch.* 87 (1921) A 11 : 197). In order to avoid the possibility of confusion, the Commission may think it convenient to cite both the above references in the entry to be made on the *Official List of Generic Names in Zoology*. Further, we hope that in the entry which we have recommended should be made on the *Official List of Specific Names in Zoology* in regard to the specific name *niobe* Linnaeus, 1758 (*Papilio*) the Commission will add a note that the nominal species so named is the type species of the genus *Fabriciana* Reuss, 1920.

42. Preparation of the Ruling given in the present “ Opinion ” :
On 21st October 1957 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate

that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(54)46, as modified in certain respects by the Vote taken on Voting Paper V.P.(O.M.)(57)14, and as adjusted in one respect by the Minute which, as explained in paragraph 41 was executed by the Secretary on 30th September 1957.

43. Original References : The following are the original references for the names placed on *Official Lists* or *Official Indexes* by the Ruling given in the present *Opinion* :—

adippe, Papilio, Linnaeus, 1767, *Syst. Nat.* (ed. 12) 1(2) : 786

adippe, Papilio, [Denis & Schiffermüller], 1775, *Ankündigung* [sic] *syst. Werkes Schmett. Wien. Gegend* : 177

berecynthia, Papilio, Poda, 1761, *Ins. Mus. graec.* : 75

cydippe, Papilio, Linnaeus, 1761, *Faun. svec.* (ed. 2) : 281

cydippe, Papilio, Linnaeus, 1767, *Syst. Nat.* (ed. 12) 1(2) : 776

Fabriciana Reuss, October 1920, *Ent. Mitt.* 9 : 192 *nota* [also published as a new name by Reuss in 1922 (*Arch. Naturgesch.* 87 (1921) A 11 : 197)]

niobe, Papilio, Linnaeus, 1758, *Syst. nat.* (ed. 10) 1 : 481

44. At the time of the submission of the present application the name applicable to the second portion of a binomen was “trivial name”. This was altered to “specific name” by the Fourteenth International Congress of Zoology, Copenhagen, 1953, which at the same time made corresponding changes in the titles of the *Official List* and *Official Index* of names of this category. These changes in terminology have been incorporated in the Ruling given in the present *Opinion*.

45. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is

accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

46. The present *Opinion* shall be known as *Opinion* Five Hundred and One (501) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-First day of October, Nineteen Hundred and Fifty-Seven.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING

APPENDIX

Designation of a Neotype for the nominal species "Papilio adippe" [Denis & Schiffermüller], 1775 (Class Insecta, Order Lepidoptera) and request that the International Commission on Zoological Nomenclature should give a direction under the Plenary Powers that the above nominal species be interpreted by the foregoing neotype instead of (as previously proposed) by reference to a previously published figure and a specified type locality

Application supplementary to an application submitted in 1949 for the validation and interpretation under the Plenary Powers of the name "Papilio adippe" [Denis & Schiffermüller], 1775

By FRANCIS HEMMING, C.M.G., C.B.E.
(London)

N. D. RILEY, C.B.E.
(British Museum (Natural History), London)

and

ROGER VERITY
(Florence, Italy)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to approve a modification of the form of the application which in 1949 we submitted asking for the use of the Plenary Powers to validate the name *Papilio adippe* as from Denis & Schiffermüller, 1775, and to take such other action under those Powers as might be necessary to secure that the specific name *adippe*, attributed and dated as indicated above, should be the oldest available such name for the High Brown Fritillary butterfly.

2. At the time when we originally submitted our application in regard to the above name, the *Règles* contained no provision for the recognition of neotypes and we were accordingly forced to fall back upon other methods in seeking to secure that the interpretation of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, when validated, should be firmly anchored to the High Brown Fritillary. The method by which we then recommended that the foregoing object should be secured involved a twofold action by the Commission under its Plenary Powers, namely: (1) a direction that the above nominal species be interpreted by reference to a specified previously published and clearly recognisable figure; (2) the designation of the "Wiener Gegend" to be the locality to be accepted as the type locality of that nominal species. The figure which we recommended should be taken for this purpose was the figure of a male specimen published in 1777 as figure 1 on plate 18 of the work by Esper (E.J.C.) entitled *Die Schmetterlinge in Abbildungen nach der Natur*. The exact provenance of this specimen was not known, though it was certainly taken in Germany, probably, like many of the specimens of common species figured by Esper, in the neighbourhood of Erlangen. In making this recommendation, we recognised that there was a certain incongruity in the request that the standard of reference for the identification of this species should be a figure of a specimen that had not been taken in the locality which it was proposed should be designated as the type locality of the species concerned, but we felt that, having regard to the widespread distribution of this species in a single subspecies in Germany and Austria, the above objection was theoretical rather than practical in kind and was outweighed by the substantial advantage to be secured by linking the specific name *adippe* [Denis & Schiffermüller] to a good figure in a very well-known work of nearly contemporary date.

3. The situation in regard to the present case was, however, completely transformed by the decision by the Fourteenth International Congress of Zoology at its meeting at Copenhagen in 1953 to include provisions in the *Règles* recognising the neotype concept. For, if such a provision had existed at the time when we drew up our original application, we should certainly have designated a Viennese example of the High Brown Fritillary to be the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775,

and, in place of the proposals which we then submitted, should have asked the International Commission under its Plenary Powers to validate the neotype so designated. Such a procedure is, in our opinion, greatly to be preferred to that which alone we were able to adopt in 1949, for it secures that the standard reference specimen shall be one taken in the type locality and belonging therefore unquestionably to the nominate subspecies. It has the further great advantage that it makes it possible to publish photographs of both the upperside and the underside of the neotype specimen and to provide also photographs of the male genitalia of that specimen. We considered this matter in the early part of 1955 and in view of the fact that at that time no decision had been promulgated by the International Commission on the application which we had originally submitted we came to the conclusion that the best course would be to notify the Office of the Commission that in view of the foregoing decision by the Copenhagen Congress we desired now to modify the form of the proposals which we had submitted for the interpretation of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, by substituting a proposal that that species should be interpreted by reference to a specimen taken in the Vienna district which we were planning to designate as the neotype of this species. A communication in this sense was accordingly addressed to the Office of the Commission on 1st May 1955 by Mr. Hemming on our joint behalf. In this letter Mr. Hemming explained that an effort was being made to obtain on loan from the Naturhistorische Museum at Vienna a specimen of the High Brown Fritillary taken in the neighbourhood of that city for designation as the neotype, and that, as soon as it had been possible to prepare a paper designating the proposed neotype, it was our intention to submit a Supplementary Application asking that the Commission should use its Plenary Powers to validate that neotype in place of the action which we had previously recommended it to take under those Powers for securing that the name *adippe* [Denis & Schiffermüller], 1775, as published in the combination *Papilio adippe*, should be the oldest available specific name for the High Brown Fritillary. After explaining that it might be a little time before we were in a position to submit our proposed Supplementary Application to the Commission, Mr. Hemming in the same letter expressed our hope that no further action on this case would be taken by the Commission until that application was in its hands.

4. Through the kindness of Dr. Hans Strouhal, Director of the Naturhistorische Museum at Vienna we have been enabled to make a careful study of a male example of the High Brown Fritillary taken at Mödling in the neighbourhood of Vienna on 23rd July 1921. This specimen, which is described in detail in the Annexe to the present application, appears to us to fulfil all the requirements needed and we now hereby designate it to be the neotype of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775 (*Ankündigung syst. Werkes Schmett. Wien Gegend* : 177).

5. In the light of the action described above we now ask the International Commission on Zoological Nomenclature :—

- (1) to grant permission for the withdrawal of the portion of our original application (Hemming, Riley & Verity, 1952, *Bull. zool. Nomencl.* 6 : 325—336) in which we asked (a) that the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775 (for the validation of the name of which we then asked) be interpreted by reference to the example figured by Esper in 1777 as figure 1 on plate 18 of the work entitled *Die Schmetterlinge in Abbildungen nach der Natur* and (b) that the locality “Wiener Gegend” be designated as the type locality for the foregoing species ;
- (2) to accept in lieu of the proposals withdrawn under (1) above the proposal that under its Plenary Powers it should validate for the foregoing nominal species the neotype designated in paragraph 4 of the present application, at the same time directing that the locality “Mödling, near Vienna” where the neotype was obtained be treated as the type locality of the nominate subspecies of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, when, as requested in our original application, that name is validated under the above Powers to be the name for the species known in England as the High Brown Fritillary.

6. In submitting this application, we desire to express our warm thanks to Dr. Hans Strouhal, Director of the Naturhistorische Museum, Wien, for the loan of the specimen of the

High Brown Fritillary taken at Mödling which has enabled us to designate a specimen of this species from the neighbourhood of Vienna to be the neotype of the nominal species *Papilio adippe* [Denis & Schiffermüller], 1775, which under the decision already taken by the Commission is now to be the oldest available name for the above species. It is in our view particularly appropriate that it should be in the Natural History Museum at Vienna that the neotype in this Viennese species should be preserved. We wish also to thank our friend Mr. B. C. S. Warren for suggestions which he was kind enough to make when we were preparing our comparative description of the species *Fabriciana adippe* [(Denis & Schiffermüller)] and *Fabriciana niobe* (Linnaeus). Finally, we are happy to have this opportunity of expressing our gratitude to the Trustees of the British Museum (Natural History), for making available its photographic unit and to the members of the staff of that unit for the photographs by which the present application is illustrated.

ANNEXE

**Particulars of the specimen designated in paragraph 4 of the present application to be the Neotype of the nominal species
“*Papilio adippe*” [Denis & Schiffermüller], 1775**

Distinguishing Characters : The species at present most commonly known under the incorrect name *Fabriciana adippe* (Linnaeus, 1767), for which the correct name will in future will be *Fabriciana adippe* [(Denis & Schiffermüller), 1775] (*Papilio adippe* [Denis & Schiffermüller], 1775) is so well known at least in the European countries where it occurs that a detailed description is not required in view of the photographs of the upper- and under-surfaces of the neotype now designated which are shown (figs. 1 and 2) on plate 1 annexed to the present paper. Excellent coloured illustrations of this species have been published

in many works concerned with European butterflies, to which reference can easily be made. For example, to mention only a few, the following works may be consulted : (i) Kirby (W.F.), *European Butterflies and Moths* ; (ii) Seitz (A.), *Die Grossschmetterlinge der Erde*, volume 1 (Die Palaearctischen Tagfalter) ; (iii) South (R.), *The Butterflies of the British Isles* ; (iv) Forster (W.) & Wohlfahrt (T.A.), *Die Schmetterlinge Mitteleuropas*, volume 1 (Tagfalter) ; (v) Verity (R.), *Le Farfalle Diurne d'Italia*, volume 4.

2. The nearest ally to *Fabriciana adippe* is *Fabriciana niobe* (Linnaeus, 1758) (*Papilio niobe* Linnaeus, 1758), the two species often occurring together. Normally, these two species can be readily separated from one another, both in the field and in the cabinet, alike by their general appearance and, in the case of *F. niobe*, by its noticeably smaller average size. Occasionally, however, individual examples of *F. adippe* may be mistaken for *F. niobe* in the cabinet, especially those in which the silver markings on the underside are lacking and in consequence the resemblance to the commoner (i.e. the unsilvered) form of *F. niobe* is enhanced.

3. The following characters, especially when taken in combination with one another, should, however, suffice at all times to separate the two species from each other :—

(a) **Male androconia (forewing upperside) :**

adippe : concentrated in two rather conspicuous stripes on veins 2 and 3 ;

niobe : present on veins 2, 3 and 4 but scattered and not formed into obvious stripes.

(b) **Forewing, underside (both sexes) :**

adippe : the chevrons forming an antemarginal row become suddenly much less well-defined above vein 4 towards the apex than below it ;

niobe : the chevrons forming an antemarginal row becoming steadily paler and smaller towards the apex without the sudden change in definition at vein 4 found in *adippe*.

(c) Hindwing, underside, cell (both sexes) :

adippe : spot in the cell (see *niobe* below) usually absent in the male and only seldom present in the female ; when present, this spot always small and quite distinct from the basal cell spot ;

niobe : a small spot (buff or silver) almost always present in both sexes, this spot lying against the point of origin of vein 7, very variable in size and shape and often coalescing with the basal cell-spot.

(d) Hindwing, underside, central row of large spots (both sexes) :

adippe : disconnected, owing to the reduction in size of spot between veins 4 and 5, this spot normally constituting only a small point ;

niobe : forms a connected series, the spot between veins 4 and 5 being normally well developed, extending to the veins on either side ;

(Note : The characters described in (c) and (d) above are clearly marked in examples with silver spots, but in unsilvered examples become increasingly difficult to detect, as these spots become merged in the general colour of the background.)

4. In addition to the characters enumerated above, the ground colour on the underside and the definition of the markings on that surface also provide useful guides for distinguishing the two species from one another. The ground colour in *adippe* is a rather smooth golden yellow, while in *niobe* it is better described as sandy buff. The pattern of the markings on the underside is more sharply defined in *niobe* than in *adippe*, by reason of the fact that the black outlines of the pale spots which form such a prominent feature in *niobe* are in that species complete and in most cases boldly indicated, whereas in *adippe* these outlines are delicate and seldom wholly surround the pale spots.

5. The genitalia in both sexes are very similar in *F. adippe* and *F. niobe*, differing in degree rather than in kind. The genitalia of both sexes are illustrated on plates 2 and 3 annexed to the present paper. On plate 2 are shown the left clasp of the male genitalia of *F. adippe* (fig. 3) and *F. niobe* (fig. 4), these

figures being enlarged by the same amount ($\times 23$). On plate 3 the two upper figures show the male genitalia viewed laterally, less the left clasp, fig. 5 representing *F. adippe*, fig. 6, *F. niobe*. The two lower figures represent the ventral view of the female genitalia, fig. 7 being that of *F. adippe* and fig. 8 that of *F. niobe*. All the figures on plate 3 are enlarged by the same amount ($\times 10$). Particular attention may be drawn to the following characters in the male and female genitalia respectively:—

(a) Male genitalia :

In the case of the male genitalia the characters of special value in separating the two species are : (a) the outline of the uncus, when viewed laterally ; (b) the shape of the style ; (c) the shape of the head of the harpe ; (d) the number and relative sizes of the teeth on the reversible portion of the penis ; (e) the shape of the extremity of the valva (this being much squarer in *adippe* than in *niobe*).

(b) Female genitalia :

In the case of the female genitalia, the chief difference between the two species is found in the region of the ostium bursae which is much more heavily sclerotised in *adippe* than in *niobe*. This feature is best seen in an unmounted specimen by pulling back the antevaginal lamella (which acts as a shield or cover to the ostium). When this is done, the more heavily sclerotised ribs of the antrum are much more readily seen in *adippe* than are the relatively weak ribs in *niobe*. Moreover, the movable papilliform postvaginal lamella which projects downwards above the actual genital opening is seen to be quite heavily sclerotised in *adippe* but almost entirely membranous in *niobe*. The membranous area which divides the eighth sternum in the mid-ventral line is in addition much longer and wider in *adippe* than in *niobe*. Only the last feature can be readily seen when the abdomen is cleared and mounted whole in the usual fashion.

6. Sex of Neotype : Male.

7. Locality of Neotype : Mödling, near Vienna.

8. Labels on Neotype : There are three labels affixed to the neotype, of which the first was attached to the specimen in question at the time when it was received on loan from the Naturhistorische Museum at Vienna and the other two have been affixed since the designation of that specimen to be the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775. The labels in question read as follows :—

First label

Coll. J. Kitt
Austria inferior
Mödling
23.7.1921

Second label

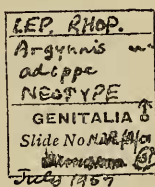
This label consists of a small circular piece of white paper with a red edge with the word "Type" printed in black in the centre. The following additions have been made to this label in black ink : (a) the letters "Neo" have been added above the printed word "Type", thus making it read "Neotype", and (b) the word "Neotype" has been written in in full on the same surface of the label immediately below the printed word "Type".

Third label

Argynnis adippe
NEOTYPE
♂ genitalia : See
Slide No. N.D.R./A/01
July 1957

9. Label on slide on which the genitalia of the Neotype are mounted : The following label has been affixed to the slide on

which the preparation of the genitalia of the neotype of *Papilio adippe* [Denis & Schiffermüller], 1775, have been mounted :—



Text FIG 1. Facsimile of label on slide on which the male genitalia of the neotype of “*Papilio adippe*” [Denis & Schiffermüller], 1775 are mounted

10. Figures of the Neotype : Photographs of the upperside and underside respectively of the neotype are reproduced on Plate 1 (fig. 1, upperside ; fig. 2, underside) annexed to the present paper. A photograph of the left clasp ($\times 23$) is reproduced as as fig. 3 on plate 2 ; a photograph of the genitalia as a whole less the clasp shown on Plate 2 is reproduced ($\times 10$) as fig. 5 on plate 3.

11. The Location of the Neotype : The Neotype described above is the property of, and is preserved in the collection of, the Naturhistorische Museum, Wien.